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# montana surface water records

## *CLARK FORK BASIN*

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Volume 3

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION

WATER RESOURCES DIVISION

SEPTEMBER 1977

**DNRC**



CLARK FORK BASIN

LOCATION OF GAGING STATIONS  
IN CLARK FORK BASIN

Thomas L. Judge, Governor

MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION

MEMBERS OF THE BOARD - CHAIRMAN CECIL WEEDING, DR. WILSON F. CLARK,  
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**DNRC**  
John C. Orth, Director

August 23, 1977

This report contains records of discharge from 1961 through 1976 for streams and canals associated with projects administered by the Montana Department of Natural Resources and Conservation in the Clark Fork Basin.

For each of the gaging stations shown on the map opposite, sixteen annual tabulations of daily average discharges are given. Most of the gaging stations located on canals operate only during the irrigation season. A few stations, located on streams and rivers, are operational the entire year.

Additional data available from the Water Resources Division for the stations shown include instantaneous measurements and water temperature.

Montana Surface Water Records: Clark Fork Basin, 1961-76 is the third volume of a three-volume series which includes the entire state. Volume 1 of that series reports data from stations in the Missouri River Basin in Montana; volume 2 includes records of stations in the Yellowstone River Basin. All may be obtained from the Water Resources Division at the address below.

Sincerely,

*Richard L Bondy*

Richard L. Bondy, P.E.  
Chief, Engineering Bureau  
WATER RESOURCES DIVISION

**WATER RESOURCES DIVISION**  
ORRIN FERRIS, ADMINISTRATOR

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*MONTANA SURFACE  
WATER RECORDS*

*Clark Fork Basin*

*1961-76*



76E 02000 Main Canal below headgate near Philipsburg, MT

LOCATION -- Lat.  $46^{\circ} 08' 09''$ , long  $113^{\circ} 23' 24''$ , in SE $\frac{1}{4}$  SE $\frac{1}{4}$  SE $\frac{1}{4}$  sec. 31, T. 5 N., R. 14 W., Granite County, on right bank, 0.3 mi. (0.5 km) downstream from headgate which is at river mile 9.8 (15.8 km) upstream from mouth of East Fork Rock Creek, 15 mi. (24 km) south of Philipsburg, 20 mi. (32 km) west of Anaconda.

DRAINAGE AREA -- Above headgate - 31 sq. mi. (80 sq. km).

GAGE -- Water stage recorder. Altitude of gage 5,970 ft. (1,820 m) from topography map.

AVERAGE DISCHARGE -- 1961 to 1976 - 25,030 AF/season (30.8 cu. hm/season).

EXTREMES -- Period of record: Maximum discharge, 205 ft.  $^3/s$  (5.81 m  $^3/s$ ), July 4, 1975. Minimum discharge, no flow at times.

REMARKS -- Records good.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MAIN CANAL BELOW HEAD GATE

NUMBER 76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1961

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	98	185	142	22			
2					0	98	185	138	22			
3					0	98	185	138	22			
4					0	91	185	138	22			
5					0	91	185	141	22			
6					0	76	185	142	22			
7					0	105	181	141	22			
8					0	113	181	142	22			
9					0	113	169	141	22			
10					0	120	160	158	22			
11					0	129	152	181	22			
12					0	120	141	177	22			
13					0	105	136	177	22			
14					0	113	117	177	22			
15					0	136	117	177	22			
16					0	154	115	177	15			
17					0	145	115	169	15			
18					0	136	115	146	15			
19					0	136	112	119	10			
20					0	145	112	92	10			
21					0	154	134	64	10			
22					32	173	158	46	0			
23					70	191	154	38	0			
24					73	191	154	31	0			
25					67	173	150	29	0			
26					67	163	150	27	0			
27					105	154	150	25	0			
28					113	163	146	25	0			
29					98	189	146	25	0			
30					98	185	146	22	0			
31					98	-----	146	22	-----			
TOTAL					821	4,058	4,667	3,367	405			
MEAN					26.5	135	151	109	13.5			
MAX					113	191	185	181	22			
MIN					0	76	112	22	0			
AC-FT					1,630	8,050	9,260	6,680	803			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MAIN CANAL BELOW HEAD GATE

NUMBER 76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1962

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	36	192	118	79			
2					0	48	192	107	79			
3					0	60	192	104	79			
4					0	85	192	97	79			
5					0	100	192	94	82			
6					0	65	182	81	81			
7					0	62	167	97	91			
8					0	65	177	104	88			
9					0	65	177	107	82			
10					0	70	172	107	82			
11					0	79	162	100	82			
12					0	79	162	94	82			
13					0	73	152	79	68			
14					0	68	127	70	55			
15					0	70	115	73	45			
16					5.0	68	111	85	32			
17					5.0	65	104	100	30			
18					5.0	65	94	67	29			
19					5.0	68	91	91	27			
20					10	73	91	94	27			
21					10	73	85	100	27			
22					10	73	82	104	27			
23					10	73	111	104	27			
24					10	79	157	100	27			
25					10	100	157	91	27			
26					16	123	152	82	27			
27					27	135	139	82	27			
28					27	131	135	82	27			
29					29	131	131	79	27			
30					36	152	127	79	20			
31					34	-----	123	79	-----			
TOTAL					245.0	2,434	4,443	2,841	1,572			
MEAN					8.03	81.1	143	93.3	52.4			
MAX					36	152	192	118	91			
MIN					0	36	82	70	20			
AC-FT					494	4,830	8,810	5,730	3,120			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW HEAD GATE

NUMBER 76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1963

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	107	101	7	85			
2					0	111	101	57	73			
3					0	115	104	107	57			
4					0	111	104	119	57			
5					0	104	104	11e	62			
6					0	104	104	131	68			
7					0	104	101	152	73			
8					0	97	104	156	68			
9					0	91	107	177	65			
10					0	79	101	192	57			
11					0	65	91	197	50			
12					0	80	82	192	46			
13					0	65	76	192	40			
14					0	20	85	192	32			
15					0	85	91	187	30			
16					0	85	85	187	27			
17					0	85	82	182	25			
18					0	88	79	182	25			
19					0	94	73	182	23			
20					0	101	70	182	25			
21					30	94	70	182	22			
22					62	107	85	182	22			
23					62	107	115	177	22			
24					62	107	131	177	22			
25					62	104	131	162	22			
26					62	107	131	148	22			
27					65	115	123	148	22			
28					76	115	119	127	22			
29					81	111	111	115	22			
30					81	104	101	104	22			
31					91	-----	97	64	-----			
TOTAL					734	2,862	3,059	4,838	1,208			
MEAN					23.7	95.4	98.7	156	40.3			
MAX					91	115	131	197	85			
MIN					0	20	70	94	22			
AC-FT					1,460	5,680	6,070	9,600	2,400			

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## MAIN CANAL BELOW HEAD GATE

NUMBER 76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1964

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						70	104	82	104			
2						70	107	68	97			
3						70	107	65	97			
4						78	107	57	94			
5						84	104	57	88			
6						107	75	62	107			
7						107	65	70	107			
8						107	94	85	107			
9						111	119	88	65			
10						111	122	91	53			
11						111	119	97	53			
12						111	115	97	53			
13						107	111	97	53			
14						100	107	97	53			
15						104	107	97	53			
16						107	100	97	53			
17						85	91	100	50			
18						70	85	104	53			
19						73	82	97	50			
20						75	79	94	46			
21						75	73	94	40			
22						73	70	91	40			
23						75	65	94	38			
24						73	62	94	34			
25						75	70	97	34			
26						79	79	100	34			
27						85	79	100	34			
28						88	79	104	34			
29						94	85	111	34			
30						97	94	111	34			
31						94	94	107	-----			
TOTAL						2,672	2,850	2,805	1,792			
MEAN						89.1	91.9	90.5	59.7			
MAX						111	122	111	107			
MIN						70	62	57	34			
AC-FT						5,300	5,650	5,560	3,550			

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NUMBER 76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1965

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	115	100	50				
2					0	115	94	57				
3					0	115	85	60				
4					40	115	82	65				
5					50	119	82	65				
6					65	131	82	65				
7					71	144	73	65				
8					71	144	60	65				
c					82	144	60	65				
10					94	144	60	65				
11					119	139	60	65				
12					139	131	60	65				
13					144	119	60	40				
14					148	115	60	7.5				
15					148	115	60	7.5				
16					148	100	70	7.5				
17					135	82	79	7.5				
18					119	85	79	7.5				
19					119	94	70	7.5				
20					119	97	79	7.5				
21					108	97	79	7.5				
22					97	91	79	7.5				
23					104	88	57	7.5				
24					119	85	34	7.5				
25					119	79	34	7.5				
26					115	73	34	7.5				
27					108	70	34	7.5				
28					108	68	34	7.5				
29	-----	-----	-----	-----	108	68	34	7.5				
30	-----	-----	-----	-----	111	85	38	7.5				
31	-----	-----	-----	-----	-----	100	46	-----	-----	-----	-----	-----
TOTAL					2,908	3,267	1,967	914.5				
MEAN					96.9	105	63.5	30.7				
MAX					148	144	100	65				
MIN					0	68	34	7.5				
AC-FT					5,770	6,480	3,900	1,820				

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## MAIN CANAL BELOW HEAD GATE

NUMBER 76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1966

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	152	94	115	19			
2					0	152	94	135	5.0			
3					0	148	94	144	5.0			
4					0	144	94	144	6.3			
5					0	144	97	148	8.8			
6					0	131	107	148	10			
7					0	115	111	148	10			
8					0	115	111	144	11			
c					0	115	115	139	11			
10					0	115	119	139	11			
11					0	104	111	148	13			
12					0	94	94	152	10			
13					0	88	82	148	7.5			
14					0	79	82	144	8.8			
15					0	79	88	139	8.8			
16					0	76	100	148	.6			
17					20	70	100	162	7.5			
18					40	73	97	167	8.8			
19					60	73	115	172	7.5			
20					97	73	135	172	7.5			
21					111	73	135	157	7.5			
22					126	73	139	131	7.5			
23					144	73	144	127	8.8			
24					162	73	144	119	8.8			
25					172	73	127	111	8.8			
26					177	73	107	104	8.8			
27					177	79	107	94	8.8			
28					177	91	107	79	8.8			
29	-----	-----	-----	-----	177	94	107	60	8.8			
30	-----	-----	-----	-----	182	94	107	50	8.8			
31	-----	-----	-----	-----	167	-----	104	44	-----	-----	-----	-----
TOTAL					1,989	2,936	3,368	4,032	270.7			
MEAN					64.2	97.9	109	130	9.02			
MAX					182	152	144	172	19			
MIN					0	70	82	44	5.0			
AC-FT					3,950	5,820	6,680	8,000	537			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

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## MAIN CANAL BELOW HEAD GATE

NUMBER 76E C2000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1967

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						16	123	79	176			
2						16	120	87	180			
3						20	123	84	184			
4						25	123	84	184			
5						30	123	84	184			
6						37	120	84	184			
7						41	116	84	184			
8						47	110	84	180			
9						47	91	54	180			
10						51	91	70	184			
11						51	103	65	176			
12						51	120	79	156			
13						53	113	76	130			
14						53	113	84	130			
15						53	123	116	110			
16						55	123	134	93			
17						65	123	134	93			
18						87	123	134	79			
19						87	123	138	65			
20						90	123	145	65			
21						103	110	145	65			
22						103	90	141	49			
23						103	81	149	35			
24						103	81	164	35			
25						106	81	164	35			
26						106	81	168	35			
27						120	79	176	35			
28						127	79	176	35			
29						127	79	184	35			
30						130	79	180	35			
31						-----	79	180	-----			
TOTAL						2,103	3,246	3,756	3,311			
MEAN						70.1	105	121	110			
MAX						130	123	184	184			
MIN						16	79	65	35			
AC-FT						4,170	6,440	7,450	6,570			

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## MAIN CANAL BELOW HEAD GATE

NUMBER 76E 02000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	43	134	70	65		
2						0	41	134	87	65		
3						0	60	134	93	65		
4						0	84	134	93	65		
5						0	93	138	93	65		
6						0	106	134	90	70		
7						0	106	123	84	81		
8						0	106	120	84	81		
9						0	106	120	87	81		
10						0	106	120	90	79		
11						0	110	120	93	79		
12						0	110	120	93	79		
13						0	110	120	93	79		
14						0	110	120	93	79		
15						0	110	113	93	79		
16						0	110	103	93	58		
17						0	110	103	93	43		
18						0	110	103	97	43		
19						0	110	103	76	43		
20						0	113	100	55	45		
21						0	116	100	60	43		
22						0	123	100	65	45		
23						0	123	100	65	43		
24						8.0	123	100	65	45		
25						10	127	79	65	43		
26						19	134	51	65	45		
27						30	134	53	65	43		
28						41	134	60	65	45		
29						41	134	60	65	43		
30						43	134	63	65	41		
31						43	134	60	65	41		
TOTAL						244.0	3,236	3,222	2,460	1,780		
MEAN						7.87	108	104	79.4	59.3		
MAX						43	134	138	97	81		
MIN						0	41	51	55	41		
AC-FT						484	6,420	6,390	4,880	3,530		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

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## MAIN CANAL BELOW HEAD GATE

NUMBER

76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	106	0	63	172			
2					0	103	0	73	168			
3					0	103	0	103	168			
4					0	120	0	127	164			
5					0	137	0	138	160			
6					0	145	0	138	160			
7					0	153	0	138	156			
8					0	149	0	138	152			
9					0	153	0	138	152			
10					0	164	0	138	149			
11					0	156	0	141	149			
12					0	149	0	149	156			
13					0	141	39	149	156			
14					0	127	87	149	160			
15					0	134	113	149	156			
16					0	145	156	149	138			
17					10	141	127	149	123			
18					23	141	130	149	93			
19					23	141	141	153	70			
20					23	141	141	172	70			
21					23	141	141	168	70			
22					23	141	141	172	68			
23					31	141	120	172	68			
24					40	47	100	184	68			
25					41	0	87	184	68			
26					51	0	79	172	65			
27					68	0	79	172	63			
28					68	0	76	172	63			
29					81	0	73	172	63			
30					103	0	65	172	60			
31					106	-----	63	172	-----			
TOTAL					714	3,219	1,958	4,615	3,528			
MEAN					23.0	107	63.2	149	118			
MAX					106	164	156	184	172			
MIN					0	0	0	63	60			
AC-FT					1,420	6,380	3,880	9,150	7,000			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MAIN CANAL BELOW HEAD GATE

NUMBER

76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						156	106	60	168			
2						156	103	60	168			
3						164	103	47	164			
4						164	103	37	164			
5						164	103	37	164			
6						168	103	37	168			
7						168	103	37	168			
8						164	103	37	156			
9						164	103	37	141			
10						172	103	37	138			
11						172	103	39	138			
12						172	103	58	138			
13						153	103	79	134			
14						153	103	100	120			
15						153	103	100	103			
16						156	103	130	100			
17						160	103	141	100			
18						160	103	149	100			
19						156	103	156	97			
20						156	103	160	97			
21						160	90	164	97			
22						160	87	164	93			
23						160	87	160	93			
24						164	87	160	45			
25						164	70	160	0			
26						164	60	164	0			
27						164	60	164	0			
28						156	60	164	0			
29						127	60	164	0			
30						106	60	160	0			
31						60	164	-----	-----			
TOTAL						4,756	2,844	3,326	3,054			
MEAN						159	91.7	107	102			
MAX						172	106	164	168			
MIN						106	60	37	0			
AC-FT						9,430	5,640	6,600	6,060			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## WATER RESOURCES DIVISION

## MAIN CANAL BELOW HEAD GATE

NUMBER 76E 02000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						138	152	144	148	19		
2						138	152	160	140	19		
3						138	156	160	145	19		
4						138	156	141	141	19		
5						138	156	110	138	19		
6						138	149	110	134	12		
7						138	145	110	130	0		
8						138	145	110	120	0		
9						138	145	106	103	0		
10						138	141	113	100	0		
11						126	141	126	96	0		
12						18	141	123	96	0		
13						120	138	123	93	0		
14						149	149	123	93	0		
15						152	168	123	99	0		
16						160	168	130	65	0		
17						168	168	152	36	0		
18						164	176	152	35	0		
19						164	176	149	35	0		
20						160	176	145	35	0		
21						160	176	152	35	0		
22						156	176	172	35	0		
23						164	176	172	35	0		
24						164	172	172	35	0		
25						164	172	168	35	0		
26						164	172	164	35	0		
27						160	168	164	35	0		
28						156	168	160	35	0		
29		-----				156	168	160	35	0		
30		-----				152	164	156	30	0		
31		-----				164	152	152	0	-----		
TOTAL						4,357	4,974	4,422	2,328	107		
MEAN						145	160	143	77.6	3.45		
MAX						168	176	172	149	19		
MIN						18	138	106	30	0		
AC-FT						8,640	9,870	8,770	4,620	212		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## WATER RESOURCES DIVISION

## MAIN CANAL BELOW HEAD GATE

NUMBER 76E 02000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	73	120	90	149		
2						0	87	120	90	145		
3						0	93	120	90	145		
4						0	116	120	90	141		
5						0	123	120	90	141		
6						0	141	120	90	138		
7						0	153	120	90	134		
8						0	153	113	90	130		
9						0	149	103	90	113		
10						0	149	106	90	87		
11						0	149	113	90	81		
12						0	149	123	100	73		
13						0	153	127	120	49		
14						0	153	127	116	68		
15						0	153	123	120	60		
16						0	156	123	120	46		
17						0	160	123	84	46		
18						0	160	123	84	37		
19						0	156	123	84	31		
20						0	156	123	84	31		
21						0	156	123	127	31		
22						0	156	110	141	31		
23						0	156	93	141	31		
24						0	149	93	138	31		
25						0	149	93	138	26		
26						0	145	93	134	13		
27						0	138	93	134	12		
28						0	130	93	138	13		
29						0	120	93	141	13		
30		-----				13	120	93	141	13		
31		-----				47	-----	93	141	-----		
TOTAL						60	4,201	3,460	3,416	2,060		
MEAN						1.94	140	112	110	68.7		
MAX						47	160	127	141	149		
MIN						0	73	93	84	13		
AC-FT						119	8,330	6,860	6,780	4,090		

## MAIN CANAL BELOW HEAD GATE

NUMBER

76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	187	149	34	26			
2					0	183	141	34	25			
3					0	178	137	32	25			
4					0	178	129	32	23			
5					0	169	117	32	23			
6					0	169	103	32	23			
7					0	174	92	32	25			
8					0	178	82	32	23			
9					0	138	76	30	17			
10					0	138	67	32	17			
11					6.1	169	61	30	17			
12					36	174	59	30	17			
13					56	178	56	30	11			
14					82	178	54	30	11			
15					98	178	51	30	11			
16					113	176	49	30	11			
17					137	174	49	28	11			
18					153	169	46	28	11			
19					161	165	44	28	11			
20					174	165	44	28	11			
21					169	157	44	28	11			
22					145	153	44	28	11			
23					145	153	42	28	11			
24					141	149	42	26	11			
25					141	157	40	26	11			
26					141	161	38	26	11			
27					141	157	38	26	11			
28					141	153	36	26	4.6			
29		-----			145	149	36	26	0			
30		-----			169	149	14	26	0			
31		-----			187	-----	32	26	-----			
TOTAL					2,682.1	4,958	2,012	906	430.6			
MEAN					86.5	165	64.9	25.2	14.4			
MAX					187	187	149	34	26			
MIN					0	138	14	26	0			
AC-FT					5,320	9,830	3,990	1,800	854			

## MAIN CANAL BELOW HEAD GATE

NUMBER

76E C2000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	56	165	125	121			
2					0	64	169	125	117			
3					0	76	169	125	117			
4					0	92	169	121	117			
5					0	92	165	121	113			
6					0	99	157	126	113			
7					0	104	157	129	113			
8					0	109	153	126	109			
9					0	109	145	129	109			
10					0	125	145	129	85			
11					0	137	145	125	113			
12					0	149	145	125	109			
13					0	161	145	125	103			
14					0	165	141	125	103			
15					0	173	141	125	99			
16					0	173	137	125	99			
17					0	173	133	125	92			
18					0	169	133	129	82			
19					0	169	133	129	74			
20					0	173	133	129	74			
21					0	173	133	129	74			
22					0	169	133	129	76			
23					0	165	133	125	76			
24					0	165	129	125	76			
25					0	169	129	121	70			
26					0	165	129	125	55			
27					0	161	129	120	59			
28					17	161	129	125	59			
29					42	161	129	125	56			
30					51	165	129	121	56			
31					51	129	121	-----	-----			
TOTAL					161	4,227	4,411	3,890	2,738			
MEAN					5.19	141	142	126	91.3			
MAX					51	173	165	129	121			
MIN					0	56	126	121	56			
AC-FT					319	8,380	8,750	7,730	5,430			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MAIN CANAL BELOW HEAD GATE

NUMBER 76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	141	95	85	89		
2						0	145	96	85	85		
3						0	178	64	92	85		
4						0	205	49	82	85		
5						0	174	49	82	82		
6						0	178	49	82	64		
7						0	174	49	82	57		
8						0	178	49	85	0		
9						0	178	49	85	0		
10						0	174	51	85	0		
11						0	169	51	85	0		
12						15	165	49	67	0		
13						54	174	51	103	0		
14						67	187	70	103	0		
15						106	183	89	103	0		
16						125	174	92	103	0		
17						129	169	89	103	0		
18						129	161	89	103	0		
19						99	161	80	99	0		
20						76	153	89	99	0		
21						76	165	85	96	0		
22						79	161	89	96	0		
23						79	161	89	96	0		
24						82	161	89	96	0		
25						92	161	85	96	0		
26						103	157	89	96	0		
27						103	157	89	92	0		
28						103	129	85	92	0		
29						106	106	85	92	0		
30						129	96	89	89	0		
31						-----	96	85	-----	0		-----
TOTAL						1,752	4,971	2,318	2,744	495.7		
MEAN						58.4	160	74.8	91.5	16.0		
MAX						129	205	96	103	89		
MIN						0	96	49	67	0		
AC-FT						3,480	9,860	4,600	5,440	983		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MAIN CANAL BELOW HEAD GATE

NUMBER 76E 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	125	96	64			
2						23	125	96	64			
3						38	125	96	64			
4						76	125	96	64			
5						92	125	96	64			
6						121	133	96	64			
7						149	157	96	67			
8						145	157	96	85			
9						145	165	96	85			
10						145	187	96	85			
11						141	187	96	85			
12						141	187	92	85			
13						141	192	92	85			
14						137	192	92	79			
15						133	187	90	76			
16						133	183	42	76			
17						133	169	92	76			
18						149	165	92	76			
19						161	165	99	76			
20						161	165	103	70			
21						161	165	103	64			
22						161	145	106	64			
23						161	117	106	64			
24						165	117	82	64			
25						153	117	73	64			
26						137	92	64	64			
27						129	67	64	44			
28						125	67	64	44			
29						125	67	64	42			
30						125	75	64	42			
31						96	64	-----	-----			
TOTAL						0	3,806	4,345	2,673	2,046		
MEAN						0	127	140	86.2	68.2		
MAX						0	165	192	106	85		
MIN						0	0	67	42	42		
AC-FT						0	7,550	8,620	5,300	4,060		



76F 02000 Nevada Creek below Nevada Creek Reservoir, near Helmville, MT

LOCATION -- Lat.  $46^{\circ} 48' 10''$ , long  $112^{\circ} 38' 59''$ , in SE $\frac{1}{4}$  SW $\frac{1}{4}$  SE $\frac{1}{4}$  sec. 11, T. 12, N., R. 10 W., Powell County, on right bank 0.2 mi. (0.3 km) downstream from reservoir, at Nevada Creek river mile 16.9 (27.2 km), 8.3 mi. (13.4 km) southeast of Helmville, 12 mi. (19 km) southwest of Lincoln.

DRAINAGE AREA -- 145 sq. mi. (376 sq. km).

GAGE -- Water stage recorder. Altitude of gage 4,545 ft. (1,385 m) from topography map.

AVERAGE DISCHARGE -- 1966 to 1976 - 32,980 AF/season (40.7 cu. hm/season).

EXTREMES -- Period of Record: Maximum discharge, 911 ft.  $^3/s$  (25.8 m  $^3/s$ ). June 20, 1975. Minimum discharge, no flow at times.

REMARKS -- Records good except for periods of extreme moss growth.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## NEVAOA CREEK BELOW RESERVOIR

NUMBER 76F 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1966

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	60	24	42	1.5			
2					0	55	0	50	1.5			
3					0	35	0	46	1.5			
4					0	35	0	46	1.5			
5					0	26	0	55	1.5			
6					10	21	0	60	1.1			
7					10	21	0	60	0			
8					10	21	0	60	0			
9					10	21	0	60	0			
10					10	21	0	55	0			
11					10	21	0	50	0			
12					12	32	0	29	0			
13					14	46	4.8	16	0			
14					16	55	8.3	19	0			
15					19	60	8.3	26	0			
16					21	60	8.3	39	1.2			
17					24	79	8.3	42	4.8			
18					26	79	16	42	3.0			
19					29	79	46	42	3.0			
20					32	79	55	42	0			
21					35	60	66	42	0			
22					39	60	50	42	0			
23					42	72	42	42	0			
24					46	72	46	42	0			
25					50	72	46	26	0			
26					55	72	46	12	0			
27					60	50	46	8.3	0			
28					60	42	46	4.8	0			
29					60	42	46	4.8	0			
30					60	42	42	3.0	0			
31					60	-----	35	1.5	-----			
TOTAL					820	1,496	690.0	1,109.4	20.4			
MEAN					26.5	49.9	22.3	35.2	.69			
MAX					60	79	66	60	4.8			
MIN					0	21	0	1.5	0			
AC-FT					1,630	2,970	1,370	2,200	41			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## NEVAOA CREEK BELOW RESERVOIR

NUMBER 76F 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1967

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				3.0	3.0	375	202	42	72			
2				3.0	3.0	414	182	42	72			
3				3.0	3.0	401	124	35	72			
4				3.0	3.0	362	116	32	72			
5				3.0	3.0	326	46	29	72			
6				3.0	3.0	314	46	29	72			
7				3.0	3.0	326	46	29	86			
8				3.0	3.0	338	46	29	100			
9				3.0	3.0	314	46	29	100			
10				3.0	3.0	290	26	29	93			
11				3.0	3.0	266	14	32	93			
12				3.0	3.0	290	14	35	93			
13				3.0	3.0	290	14	25	93			
14				3.0	3.0	290	14	39	93			
15				3.0	3.0	255	12	46	93			
16				3.0	4.8	222	12	50	93			
17				3.0	10	202	12	66	93			
18				3.0	12	375	12	79	93			
19				3.0	12	244	12	79	93			
20				3.0	14	182	12	79	93			
21				3.0	29	182	12	79	93			
22				3.0	173	518	12	70	93			
23				3.0	350	244	12	79	93			
24				3.0	375	164	12	70	93			
25				3.0	350	140	12	72	66			
26				3.0	266	132	14	72	42			
27				3.0	173	132	29	72	42			
28				3.0	132	164	42	72	42			
29				3.0	156	173	42	72	32			
30				3.0	244	192	42	72	26			
31				3.0	375	-----	46	77	-----			
TOTAL				0.0	2,720.8	8,117	1,283	1,685	2,363			
MEAN				3.00	87.8	271	41.4	54.4	78.3			
MAX				3.0	275	518	202	79	100			
MIN				3.0	3.0	122	12	29	26			
AC-FT				179	5,400	16,100	2,540	3,340	4,680			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## NEVADA CREEK BELOW PESERVOIR

NUMBER

76F 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				24	29	145	64	15	60	89		
2				24	38	129	56	45	60	89		
3				24	41	145	35	45	60	89		
4				24	41	180	35	45	60	95		
5				24	48	210	35	60	60	95		
6				24	64	171	35	69	60	95		
7				24	64	171	35	64	60	89		
8				24	69	137	32	64	60	89		
9				24	69	145	32	73	60	89		
10				24	69	145	32	84	60	89		
11				24	73	129	32	84	60	89		
12				24	89	129	32	84	56	89		
13				24	89	129	29	84	56	89		
14				24	89	129	29	84	52	48		
15				24	89	114	29	78	52	19		
16				21	89	107	29	89	52	16		
17				21	78	95	29	89	52	16		
18				21	69	95	0	84	52	16		
19				21	69	114	0	84	52	16		
20				21	73	129	0	84	52	16		
21				19	73	129	0	84	52	16		
22				19	78	129	0	84	52	16		
23				19	78	122	0	84	65	16		
24				19	84	89	0	84	95	16		
25				19	78	73	3.0	84	89	16		
26				19	84	73	14	78	89	14		
27				19	84	73	24	78	89	14		
28				19	114	73	24	73	89	14		
29				19	145	69	29	69	89	14		
30				19	171	64	41	56	89	14		
31				-----	171	-----	45	60	-----	14	-----	
TOTAL				655	2,499	3,642	780.0	2,272	1,934	1,486		
MEAN				21.8	80.6	121	25.2	73.3	64.5	47.9		
MAX				24	171	210	64	89	95	95		
MIN				19	29	64	0	45	52	14		
AC-FT				1,300	4,960	7,220	1,550	4,510	3,840	2,950		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## NEVADA CREEK BELOW RESERVOIR

NUMBER

76F 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				17	129	92	50	39	124	43		
2				17	124	92	50	57	118	43		
3				20	118	92	39	61	118	43		
4				32	107	97	69	57	118	43		
5				46	113	107	78	65	124	43		
6				235	118	107	78	69	124	43		
7				244	118	102	129	65	124	43		
8				167	118	92	167	65	97	43		
9				135	118	92	124	69	87	43		
10				141	118	92	97	74	83	43		
11				161	135	92	83	69	83	43		
12				154	161	92	78	69	83	43		
13				148	181	102	74	69	83	23		
14				135	189	113	74	74	83	11		
15				141	196	107	65	69	87	11		
16				129	189	102	65	69	92	8.0		
17				129	174	97	61	74	87	8.0		
18				125	148	83	57	74	87	11		
19				135	135	74	53	87	87	11		
20				135	129	74	50	87	87	8.0		
21				129	129	74	46	87	87	8.0		
22				124	124	74	46	97	83	8.0		
23				135	114	78	46	113	83	11		
24				196	114	74	43	107	83	11		
25				227	114	61	43	107	57	11		
26				204	107	29	39	107	43	11		
27				181	114	29	39	113	43	11		
28				161	102	26	32	124	43	11		
29				141	92	26	29	124	43	11		
30				135	92	23	32	124	43	11		
31				92	92	39	124	-----	11	-----		
TOTAL				4,089	4,012	2,395	1,885.0	2,589	2,584	722.0		
MEAN				136	129	79.8	60.8	83.5	86.1	23.3		
MAX				244	196	113	167	124	124	43		
MIN				17	92	23	5.0	39	43	8.0		
AC-FT				8,110	7,960	4,750	3,740	5,140	5,130	1,430		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## NEVADA CREEK BELOW RESERVOIR

NUMBER 76F 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				14	36	196	83	39	124			
2				14	36	174	83	39	124			
3				14	36	174	83	32	124			
4				14	32	189	83	32	118			
5				14	29	204	83	32	118			
6				14	36	204	50	32	118			
7				14	39	219	23	36	118			
8				14	39	219	23	39	113			
9				14	39	196	26	39	118			
10				14	46	174	26	39	124			
11				11	57	148	23	39	124			
12				11	69	135	20	39	124			
13				11	83	169	20	43	124			
14				11	83	167	32	50	113			
15				11	87	135	36	61	107			
16				11	107	129	36	65	102			
17				11	174	124	36	65	102			
18				11	280	113	36	65	102			
19				11	337	102	36	65	102			
20				17	357	97	32	69	102			
21				23	367	92	36	74	102			
22				23	347	87	39	74	97			
23				23	347	83	43	74	97			
24				23	347	92	39	74	97			
25				23	337	102	36	74	97			
26				23	328	107	43	83	97			
27				26	357	118	36	83	97			
28				26	347	118	53	83	92			
29	-----			32	229	97	50	97	92			
30	-----			36	253	83	43	102	92			
31	-----			-----	227	-----	36	113	-----	-----	-----	-----
TOTAL				514	5,488	4,267	1,324	1,851	3,261			
MEAN				17.1	177	142	42.7	59.7	109			
MAX				36	367	219	83	113	124			
MIN				11	29	83	20	32	92			
AC-FT				1,020	10,890	8,460	2,630	3,670	6,470			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## NEVADA CREEK BELOW RESERVOIR

NUMBER 76F 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				28	84	176	79	51	74	28	6.0	
2				28	84	176	74	51	74	28	6.0	
3				28	84	155	74	51	74	28	6.0	
4				28	89	148	74	51	74	28	6.0	
5				40	89	148	37	55	74	19	6.0	
6				40	89	142	14	59	69	10	6.0	
7				40	89	135	14	59	69	10	6.0	
8				40	89	129	14	59	69	10	6.0	
9				40	142	123	14	64	69	10	6.0	
10				40	237	123	14	64	69	8.0	6.0	
11				40	253	123	14	64	69	8.0	6.0	
12				40	261	123	12	64	69	8.0	6.0	
13				40	277	123	12	64	69	8.0	6.0	
14				40	315	123	12	64	69	8.0	6.0	
15				40	285	123	12	64	69	8.0	6.0	
16				69	305	123	16	69	69	8.0	6.0	
17				69	221	123	19	43	54	8.0	6.0	
18				69	196	123	34	34	47	8.0	6.0	
19				69	176	123	43	56	43	8.0	6.0	
20				64	176	123	55	74	43	8.0	6.0	
21				64	155	123	55	74	43	6.0	6.0	
22				64	135	105	55	74	40	6.0	6.0	
23				64	123	94	55	74	34	6.0	6.0	
24				74	123	89	55	74	34	6.0	6.0	
25				84	123	74	55	74	31	6.0	6.0	
26				84	123	74	55	69	28	6.0	6.0	
27				84	123	74	51	69	28	6.0	6.0	
28				84	123	74	51	69	28	6.0	6.0	
29	-----			84	123	74	51	69	28	6.0	6.0	
30	-----			84	142	79	51	74	28	6.0	6.0	
31	-----			-----	176	-----	51	74	-----	6.0	-----	-----
TOTAL				1,662	5,010	3,545	1,222	1,957	1,631	325.0	180.0	
MEAN				55.4	162	118	39.4	63.1	54.4	10.5	6.00	
MAX				84	315	176	79	74	74	28	6.0	
MIN				28	84	74	12	34	28	6.0	6.0	
AC-FT				3,300	9,040	7,030	2,420	3,860	3,240	645	357	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## NEVADA CREEK BELOW RESERVOIR

NUMBER 76F 02000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				34	95	531	108	9	50	59		
2				90	84	531	108	32	95	59		
3				90	84	480	90	32	95	39		
4				90	84	433	73	36	95	56		
5				95	84	377	36	43	95	54		
6				95	84	340	14	50	95	43		
7				95	84	306	14	63	95	43		
8				95	84	317	14	73	84	43		
9				95	84	284	14	73	84	43		
10				95	84	253	14	73	84	43		
11				95	84	214	14	73	84	50		
12				95	84	187	14	79	84	50		
13				95	84	169	14	79	84	50		
14				95	84	152	14	79	84	50		
15				95	90	136	14	79	84	50		
16				95	102	121	14	79	84	32		
17				102	115	121	14	79	84	16		
18				108	196	115	14	79	79	16		
19				108	433	115	14	79	79	16		
20				108	419	115	29	79	79	14		
21				108	404	115	29	84	68	14		
22				108	391	115	29	84	63	14		
23				108	377	115	29	90	63	14		
24				108	340	115	29	102	63	14		
25				108	295	108	29	108	63	14		
26				108	263	108	29	108	59	14		
27				108	223	108	29	108	59	14		
28				108	205	108	29	108	59	14		
29				108	223	108	29	102	59	14		
30				108	295	108	29	95	59	14		
31				-----	391	-----	29	90	-----	14	-----	
TOTAL				3,000	5,949	6,405	959	2,370	2,352	983		
MEAN				100	192	214	30.9	76.5	78.4	31.7		
MAX				108	433	531	108	108	95	59		
MIN				84	84	108	14	29	59	14		
Avg-EFT				5,950	11,800	12,700	1,900	4,700	4,670	1,950		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## NEVADA CREEK BELOW RESERVOIR

NUMBER 76F 02000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				8.0	29	59	43	22	8.0	5.5		
2				8.0	39	54	36	22	8.0	5.5		
3				8.0	43	54	32	22	8.0	5.5		
4				8.0	50	54	50	29	8.0	3.0		
5				8.0	54	54	59	36	5.5	5.5		
6				8.0	54	54	54	36	5.5	3.0		
7				8.0	68	54	32	26	5.5	1.0		
8				8.0	73	59	30	25	14	1.0		
9				8.0	68	63	1.0	0	19	3.0		
10				8.0	68	63	1.0	1.0	19	3.0		
11				8.0	73	73	1.0	25	19	5.5		
12				8.0	73	95	1.0	25	19	8.0		
13				8.0	68	115	0	22	16	8.0		
14				8.0	68	90	0	16	16	1.0		
15				8.0	73	68	0	5.5	16	1.0		
16				8.0	79	78	5.5	5.5	16	1.0		
17				8.0	84	63	11	5.5	16	1.0		
18				8.0	84	63	3.0	5.5	11	1.0		
19				8.0	84	59	0	5.5	11	5.5		
20				8.0	84	43	0	5.5	14	5.5		
21				8.0	90	43	3.0	3.0	11	5.5		
22				8.0	95	43	1.0	3.0	8.0	5.5		
23				8.0	95	43	0	3.0	8.0	8.0		
24				8.0	95	43	0	5.5	8.0	1.0		
25				8.0	73	43	1.0	3.0	14	1.0		
26				14	59	43	0	5.5	14	1.0		
27				22	79	39	1.0	3.0	11	8.0		
28				22	63	36	16	3.0	8.0	8.0		
29				25	54	36	19	1.0	8.0	4.3		
30				25	59	39	25	3.0	5.5	0		
31				59	59	22	5.5	-----	0	-----		
TOTAL				308.0	2,137	1,723	420.5	388.5	350.0	219.8		
MEAN				10.3	68.9	57.4	13.6	12.5	11.7	7.09		
MAX				25	95	115	59	36	19	19		
MIN				8.0	29	36	0	5.5	0	0		
Avg-EFT				611	4,240	3,420	834	771	694	436		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## NEVADA CREEK BELOW PESERVOIR

## NUMBER 76F C2000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			59	161	101	129	68	50	35			
2			35	161	101	101	68	19	19			
3			35	152	108	95	68	19	11			
4			54	152	136	95	68	22	11			
5			84	152	187	95	68	22	11			
6			79	161	196	95	63	35	11			
7			79	161	178	95	73	46	11			
8			73	161	161	68	89	54	11			
9			73	121	136	32	95	59	11			
10			68	115	108	13	95	68	11			
11			58	115	95	11	89	79	11			
12			73	115	89	11	89	79	11			
13			89	115	95	11	84	79	11			
14			84	115	101	11	79	79	11			
15			79	115	108	11	73	79	11			
16			95	108	108	11	68	68	11			
17			89	89	115	11	68	54	11			
18			53	84	121	19	68	46	13			
19			59	84	121	43	68	50	13			
20			59	84	121	43	73	50	13			
21			53	73	121	43	73	50	13			
22			63	54	121	39	79	46	13			
23			39	54	121	50	73	43	13			
24			68	54	115	63	79	39	13			
25			79	68	129	63	70	35	13			
26			108	84	144	68	70	35	11			
27			121	84	144	68	84	35	11			
28			136	89	144	68	84	35	11			
29		-----	161	101	144	68	84	35	11			
30		-----	161	101	144	50	84	35	11			
31		-----	-----	101	-----	63	84	-----	11	-----		
TOTAL			2,376	3,384	3,813	1,652	2,356	1,445	389			
MEAN			79.2	109	127	53.3	77.3	48.2	12.5			
MAX			161	161	196	129	95	79	35			
MIN			35	54	89	11	63	19	11			
AC-FT			4,710	6,710	7,560	3,280	4,750	2,870	772			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## NEVADA CREEK BELOW RESERVOIR

## NUMBER 76F C2000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			0	449	205	0	42	52				
2			0	514	205	0	42	52				
3			0	636	196	0	42	52				
4			0	671	187	0	42	52				
5			0	601	187	0	42	52				
6			0	601	178	0	42	52				
7		P4	654	178	0	0	23	52				
8			178	636	169	0	17	52				
9			253	654	169	0	17	52				
10			340	496	166	6.0	17	52				
11			351	433	161	62	23	52				
12			364	433	136	62	23	52				
13			306	449	129	62	23	52				
14			306	464	108	52	29	52				
15			306	480	108	52	36	73				
16			306	391	95	52	42	73				
17			306	351	95	52	42	73				
18			306	391	84	52	52	73				
19			306	636	73	52	52	73				
20			306	911	73	52	52	73				
21			317	731	73	52	52	73				
22			317	480	68	42	52	73				
23			214	419	68	42	52	73				
24			169	351	68	42	52	73				
25			152	306	52	42	52	73				
26			144	284	52	42	52	73				
27			214	274	52	42	52	73				
28			214	233	52	42	52	73				
29		-----	214	214	52	42	52	73				
30		-----	242	196	52	42	52	73				
31		-----	340	-----	6.0	42	-----	73	-----			
TOTAL			0	6,555	14,339	3,497.0	1,028.0	1,220	1,969			
MEAN			0	211	478	113	33.2	40.7	62.5			
MAX			0	364	911	205	62	52	73			
MIN			0	0	196	6.0	0	17	52			
AC-FT			0	13,000	28,440	6,740	2,040	2,420	3,010			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## WATER RESOURCES DIVISION

NEVADA CREEK BELOW RESERVOIR

NUMBER 76F 02000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0	167	217	105	55	84			
2				0	167	205	105	95	84			
3				0	205	152	105	95	84			
4				0	380	192	105	95	84			
5				0	467	180	105	65	84			
6				0	430	167	105	34	84			
7				155	392	167	105	57	84			
8				207	367	167	105	75	75			
9				280	430	155	105	75	75			
10				255	505	155	105	75	75			
11				255	592	155	95	75	75			
12				267	567	142	65	75	75			
13				305	467	130	20	75	75			
14				280	492	117	8.0	75	65			
15				267	592	105	8.0	95	57			
16				242	517	105	20	95	57			
17				205	417	117	34	95	57			
18				167	405	117	34	95	57			
19				142	405	105	34	84	57			
20				130	367	105	34	84	57			
21				117	355	105	34	84	57			
22				105	342	105	34	84	57			
23				105	355	105	34	84	57			
24				95	342	105	34	84	57			
25				105	342	105	34	75	57			
26				117	330	117	41	75	57			
27				105	305	117	34	75	57			
28				105	280	117	34	75	41			
29				117	280	117	34	84	20			
30		-----	-----	142	255	105	65	84	20			
31		-----	-----	230	-----	65	84	-----	-----			
TOTAL				4,330	11,747	4,093	1,875.0	2,497	1,925			
MEAN				144	379	136	60.5	80.5	64.2			
MAX				305	592	217	105	95	84			
MIN				0	167	105	8.0	34	20			
AC-FT				8,590	23,300	8,120	3,720	4,950	3,820			



76F 03000 Douglas Canal below headgate near Helmville, MT

LOCATION -- Lat.  $46^{\circ} 49' 07''$ , long  $112^{\circ} 51' 48''$ , in SE $\frac{1}{4}$ SE $\frac{1}{4}$  SW $\frac{1}{4}$  sec. 4, T. 12 N., R. 10 W., Powell County, on right bank 0.6 mi. (1.0 km) downstream from headgate which is at Nevada Creek River mile 14.5 (23.3 km), 6 mi. (10 km) south-east of Helmville.

DRAINAGE AREA -- Above headgate 153 sq. mi. (396 sq. km).

GAGE -- Water stage recorder. Altitude of gage 4,470 ft. (1,362 m) from topography map.

AVERAGE DISCHARGE -- 1966 to 1976 - 8,240 AF/season (10.2 cu. hm/season).

EXTREMES -- Period of record: Maximum discharge, 81 ft.  $^3/s$  (2.3 m  $^3/s$ ) June 17, 1975. Minimum discharge, no flow at times.

REMARKS -- Record good except for periods of extreme moss growth.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F 03000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1966

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1						34	24	22	5.5			
2						40	2.5	24	4.5			
3						35	0	24	3.8			
4						31	0	28	3.8			
5						33	0	31	3.8			
6						36	0	31	2.7			
7						36	0	31	0			
8						36	0	30	0			
9						38	0	28	0			
10						38	0	25	0			
11						40	0	25	0			
12						40	0	20	0			
13						35	13	15	0			
14						31	24	15	0			
15						30	22	14	0			
16						28	22	12	0			
17						27	22	12	0			
18						27	22	12	0			
19						30	22	14	0			
20						36	22	14	0			
21						36	21	14	0			
22						36	21	20	0			
23						36	21	24	0			
24						35	20	24	0			
25						35	20	25	0			
26						35	20	17	0			
27						35	20	3.8	0			
28						31	20	0	0			
29		-----				31	20	4.5	0			
30		-----				33	20	8.3	0			
31		-----				20		6.5	-----			
TOTAL						1,024	418.5	574.1	24.1			
MEAN						34.1	13.5	18.5	.80			
MAX						40	24	31	5.5			
MIN						27	0	0	0			
AC-FT						2,030	830	1,140	48			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F 03000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1967

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					4.0	41	34	18	30			
2					4.0	41	32	19	30			
3					4.0	39	29	18	30			
4					4.0	39	29	16	30			
5					4.0	37	18	16	32			
6					4.0	37	18	16	32			
7					4.0	37	19	16	32			
8					4.0	37	19	19	34			
9					4.0	35	19	23	34			
10					4.0	35	7.8	27	34			
11					4.0	35	0	27	34			
12					4.0	37	0	27	30			
13					4.0	18	0	27	29			
14					4.0	7.8	0	27	29			
15					4.0	7.8	0	27	30			
16					4.0	13	0	27	34			
17					13	16	0	27	37			
18					20	18	0	29	30			
19					20	18	0	29	30			
20					21	16	0	29	30			
21					23	16	0	29	29			
22					24	19	0	29	26			
23					27	16	0	29	29			
24					27	15	1.9	29	29			
25					26	13	4.8	29	27			
26					26	23	4.8	29	23			
27					24	32	11	29	23			
28					24	32	20	29	23			
29		-----			24	32	24	30	19			
30		-----			30	34	24	30	19			
31		-----			37	-----	20	30	-----			
TOTAL					430.0	796.6	335.3	786	873			
MEAN					13.9	26.6	10.8	25.4	29.1			
MAX					37	41	34	30	34			
MIN					4.0	7.8	0	16	18			
AC-FT					853	1,580	665	1,560	1,730			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F C3000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					10	41	39	37	30			
2					9.8	41	37	27	30			
3					13	41	6.8	29	30			
4					16	37	0	30	30			
5					19	27	0	32	30			
6						27	26	0	36	30		
7						29	24	0	39	29		
8						29	23	0	37	29		
9						27	23	0	39	29		
10						27	23	0	41	29		
11						29	23	0	41	29		
12						34	23	0	41	29		
13						34	23	1.0	43	29		
14						34	23	4.0	42	29		
15						35	23	4.0	41	29		
16						32	23	4.0	37	29		
17						30	21	4.0	39	29		
18						30	23	4.0	41	29		
19						30	41	4.8	41	29		
20						30	45	4.8	41	30		
21						37	45	4.8	39	29		
22						39	45	4.8	39	29		
23						30	45	4.8	39	30		
24						41	45	3.3	37	36		
25						41	41	0	37	36		
26						41	41	0	39	37		
27						39	41	6.8	39	39		
28						39	41	8.8	36	39		
29						41	39	32	34	39		
30						41	39	29	27	39		
31						41	-----	27	30	-----		
TOTAL					963.8	996	234.7	1,144	940			
MEAN					31.1	33.2	7.57	36.9	31.3			
MAX					41	45	39	43	39			
MIN					9.8	21	0	27	29			
AC-FT					1,910	1,980	466	2,270	1,860			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F C3000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					3.2	5.8	43	14	16	48	26	
2					3.2	9.8	43	13	24	48	24	
3					3.2	12	45	15	30	48	24	
4					3.2	12	45	16	30	45	24	
5					3.2	12	43	18	30	45	24	
6					3.2	11	45	18	32	48	24	
7					3.2	11	43	7.0	30	48	24	
8					3.2	11	41	0	30	43	24	
9					3.2	11	41	0	32	37	23	
10					3.2	16	41	0	32	37	23	
11					3.2	24	41	0	30	37	23	
12					3.2	24	41	0	32	37	23	
13					3.2	26	41	0	36	37	17	
14					3.2	36	43	0	37	35	4.0	
15					3.2	32	43	0	39	35	0	
16					3.2	30	43	0	39	37	0	
17					0	29	43	0	39	37	0	
18					0	29	43	0	39	37	0	
19					0	20	39	0	39	37	0	
20					0	30	39	0	37	37	0	
21					4.0	34	39	0	37	37	0	
22					11	34	39	5.6	39	34	0	
23					9.8	41	41	15	43	37	0	
24					11	39	36	15	43	39	0	
25					11	39	30	15	43	34	0	
26					11	37	27	15	45	29	0	
27					9.8	39	21	15	48	29	0	
28					6.8	39	15	15	52	29	0	
29					5.8	37	15	15	52	29	0	
30					5.8	43	16	15	52	29	0	
31					43	-----	15	48	-----	0	-----	
TOTAL					137.2	828.6	1,125	241.6	1,155	1,139	307.0	
MEAN					4.57	26.7	37.5	7.79	37.3	38.0	9.90	
MAX					11	43	45	16	52	48	26	
MIN					0	5.8	15	0	16	29	0	
AC-FT					272	1,640	2,230	479	2,200	2,260	609	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F 03000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						41	34	34	52			
2						48	32	14	50			
3						50	32	13	48			
4						50	32	12	48			
5						52	32	12	48			
6						50	16	12	48			
7						52	0	14	48			
8						52	0	16	48			
9						48	0	16	48			
10						43	0	14	50			
11						45	0	19	50			
12						50	0	19	50			
13						57	0	20	50			
14						54	0	26	48			
15						50	0	30	45			
16						43	0	35	45			
17						37	0	37	45			
18						35	0	37	45			
19						34	0	39	41			
20						32	0	41	37			
21						30	0	43	37			
22						30	0	45	37			
23						32	0	41	37			
24						35	0	41	35			
25						45	0	41	34			
26						45	0	43	34			
27						45	0	43	34			
28						48	0	48	34			
29						43	0	50	32			
30						34	0	50	29			
31						-----	0	50	-----			
TOTAL						1,310	178	929.4	1,287			
MEAN						43.7	5.74	30.0	42.9			
MAX						57	34	50	52			
MIN						30	0	2.4	29			
AC-FT						2,600	353	1,840	2,550			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F 03000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						50	34	32	41	19		
2						50	34	30	39	19		
3						48	34	30	41	19		
4						48	34	30	43	19		
5						50	14	34	43	14		
6						48	0	37	43	31		
7						45	0	37	41	0		
8						45	0	37	43	0		
9						45	0	37	48	0		
10						45	0	36	45	0		
11						45	0	39	45	0		
12						43	0	41	43	0		
13						43	0	41	43	0		
14						45	0	39	43	0		
15						48	0	39	43	0		
16						48	5.2	36	-----	0		
17						48	14	37	34	0		
18						45	19	32	26	0		
19						41	21	36	27	0		
20						41	27	36	27	0		
21						43	30	41	27	0		
22						41	27	41	26	0		
23						37	30	43	23	0		
24						37	34	45	23	0		
25						34	34	45	20	0		
26						32	32	45	18	0		
27						34	32	45	18	0		
28						34	32	45	18	0		
29						34	32	45	18	0		
30						34	32	48	18	0		
31						-----	32	45	-----	0		
TOTAL						1,281	583.2	1,207	1,008	93.1		
MEAN						42.7	18.8	38.5	23.6	3.00		
MAX						50	34	46	48	19		
MIN						32	0	30	18	0		
AC-FT						2,540	1,160	2,350	2,000	135		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F 03000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	65	30	5.3	37	36		
2					0	65	29	5.8	39	34		
3					2.3	65	32	5.8	39	26		
4					8.8	63	41	12	39	30		
5					12	60	18	19	34	27		
6					13	55	0	26	30	27		
7					13	60	0	29	34	34		
8					13	65	0	30	37	34		
9					11	57	0	30	37	34		
10					19	50	0	34	37	34		
11					34	45	0	30	37	32		
12					39	45	0	39	37	32		
13					39	43	0	39	37	32		
14					39	41	0	39	37	32		
15					41	37	0	29	36	32		
16					48	36	0	39	37	13		
17					48	34	0	39	41	0		
18					52	30	0	37	39	0		
19					60	30	0	36	41	0		
20					60	29	5.8	36	39	0		
21					60	32	5.8	36	36	0		
22					57	36	4.0	36	36	0		
23					57	37	4.8	37	36	0		
24					55	39	4.0	41	36	0		
25					52	39	4.0	39	36	0		
26					50	32	4.8	39	36	0		
27					46	27	4.8	39	36	0		
28					43	27	6.8	39	36	0		
29					45	27	7.8	39	36	0		
30		-----			50	27	7.8	29	36	0		
31	-----	-----			63	-----	6.8	37	-----	0	-----	
TOTAL					0	1,132.1	1,298	217.2	1,000.4	1,104	489	
MEAN					0	36.5	43.3	7.01	32.3	36.8	15.8	
MAX					0	63	65	41	41	41	36	
MIN					0	0	27	0	5.8	30	0	
Avg-Et					0	2,250	2,570	431	1,980	2,190	970	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F 03000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	13	19	12	15	0		
2					0	20	19	12	14	0		
3					0	29	16	12	14	0		
4					0	36	14	21	18	0		
5					0	41	13	24	24	0		
6					0	39	13	23	26	0		
7					0	45	18	23	25	0		
8					0	52	23	3.7	23	0		
9					0	50	26	0	32	0		
10					0	45	26	0	3.3	0		
11					0	43	29	0	20	0		
12					0	39	36	0	19	0		
13					0	36	37	0	19	0		
14					0	36	29	2.3	14	0		
15					0	39	20	4.0	7.8	0		
16					0	43	23	4.0	2.5	0		
17					0	45	21	4.0	0	3.3		
18					0	45	21	4.0	0	4.0		
19					0	41	21	3.3	0	0		
20					0	36	20	3.3	0	0		
21					0	39	20	3.3	0	0		
22					0	50	20	3.3	0	0		
23					0	48	20	3.3	0	0		
24					0	45	20	0	0	0		
25					0	37	20	3.3	0	0		
26					3.5	27	20	4.0	0	0		
27					13	32	20	0	0	0		
28					12	29	20	11	0	0		
29		-----			12	24	15	14	0	0		
30		-----			12	19	9.8	16	0	0		
31	-----	-----			19	-----	15	0	-----	-----		
TOTAL					52.5	1,142	628.8	228.8	276.6	7.3		
MEAN					1.75	36.8	21.0	7.38	8.92	.24		
MAX					13	52	37	24	32	4.0		
MIN					0	13	9.8	0	0	0		
Avg-Et					104	2,270	1,250	454	549	14		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F 03000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0	37	65	71	47	43	29		
2				0	52	63	65	50	24	23		
3				0	50	65	71	47	24	14		
4				0	50	73	68	47	26	14		
5				0	50	73	71	52	29	14		
6				0	50	71	65	55	35	14		
7				0	50	68	63	52	43	14		
8				0	50	63	26	52	50	9.8		
9				0	50	57	0	55	50	5.8		
10				0	50	52	0	52	52	7.8		
11				0	50	52	0	43	55	7.8		
12				0	48	55	0	41	55	7.8		
13				0	48	52	0	41	52	7.8		
14				0	45	57	0	37	52	7.8		
15				0	45	57	0	33	52	7.8		
16				0	43	57	0	33	50	7.8		
17				0	41	63	0	33	43	7.8		
18				0	41	65	4.7	33	41	7.8		
19				1.8	41	68	29	33	41	6.8		
20				4.7	41	68	29	37	41	6.8		
21				4.7	39	68	29	41	41	6.8		
22				4.0	35	68	29	43	41	6.8		
23				11	33	71	33	41	37	6.8		
24				21	37	71	37	43	33	6.8		
25				24	43	68	39	45	33	6.8		
26				26	45	65	43	47	32	6.8		
27				26	47	65	50	57	32	6.8		
28				27	50	68	50	57	32	5.8		
29				-----	27	50	73	47	57	30	3.3	
30				-----	26	65	77	45	57	29	3.3	
31				-----	68	-----	45	57	-----	3.3	-----	
TOTAL				203.2	1,444	1,938	1,009.7	1,418	1,198	284.7		
MEAN				6.77	46.6	64.6	32.6	45.7	39.9	9.18		
MAX				27	68	77	71	57	55	29		
MIN				0	33	52	0	33	24	3.3		
AC-FT				403	2,860	3,840	2,000	2,810	2,380	565		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F 03000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0	26	39	0	4.0	29			
2				0	26	52	0	4.0	27			
3				0	32	60	0	4.0	27			
4				0	39	60	0	4.0	27			
5				0	55	60	0	4.8	27			
6				0	65	60	0	4.8	27			
7				0	74	60	0	4.8	29			
8				0	77	60	0	6.8	12			
9				0	74	57	0	9.8	0			
10				0	65	57	2.7	12	0			
11				0	60	57	13	13	0			
12				0	65	48	13	14	0			
13				0	71	41	12	15	0			
14				0	71	41	8.8	19	0			
15				0	71	36	8.8	20	0			
16				0	71	32	9.8	6	0			
17				0	81	32	9.8	26	0			
18				0	77	27	8.8	27	0			
19				0	71	27	8.8	30	0			
20				0	57	26	11	30	0			
21				0	36	26	9.8	29	0			
22				0	34	24	5.8	26	0			
23				0	36	24	4.0	29	0			
24				0	39	16	4.0	29	0			
25				0	37	13	4.0	29	0			
26				0	39	15	4.0	29	0			
27				0	43	6.8	4.0	29	0			
28				0	52	0	4.0	29	0			
29				2.2	48	0	4.0	29	0			
30				14	39	0	4.0	29	0			
31				24	-----	0	4.0	-----	0	-----		
TOTAL				40.2	1,631	1,056.8	158.1	560.0	205			
MEAN				1.30	54.4	34.1	5.10	14.0	6.61			
MAX				24	81	60	13	30	26			
MIN				0	26	0	0	4.0	0			
AC-FT				80	3,240	2,100	314	1,130	407			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

DOUGLAS CANAL BELOW HEAD GATE

NUMBER 76F 03000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	46	48	37	39			
2					0	45	48	37	39			
3					0	45	43	35	39			
4					3.3	50	43	35	39			
5					4.0	48	45	20	37			
6					0	50	43	19	39			
7					0	50	43	26	35			
8					0	50	43	35	34			
9					0	50	32	24	34			
10					0	50	21	34	32			
11					4.8	50	21	34	32			
12					5.8	48	9.8	34	32			
13					4.8	45	0	34	32			
14					4.8	43	0	35	30			
15					4.8	48	0	41	27			
16					4.8	52	0	41	27			
17					4.8	57	0	41	27			
18					14	55	0	41	27			
19					37	52	0	41	26			
20					32	50	0	39	26			
21					35	50	0	39	26			
22					39	50	0	39	26			
23					36	52	0	39	26			
24					39	52	0	39	24			
25					41	55	0	35	24			
26					41	57	2.6	35	24			
27					39	55	4.8	35	24			
28					45	52	4.8	35	21			
29					45	50	4.8	41	9.8			
30		-----	-----		45	50	18	30	4.0			
31		-----	-----		45	-----	37	39	-----			
TOTAL					0	577.9	1,509	511.8	1,117	861.9		
MEAN					0	18.6	50.3	16.5	36.0	26.7		
MAX					0	45	57	48	41	39		
MIN					0	0	43	0	15	4.0		
AC-FT					0	1,150	2,990	1,020	2,220	1,710		



76GJ 02089 Main Canal below County Bridge near Philipsburg, MT

LOCATION -- Lat.  $46^{\circ} 10' 58''$ , long  $113^{\circ} 25' 46''$  in SW $\frac{1}{4}$  NW $\frac{1}{4}$  SW $\frac{1}{4}$   
sec. 13, T. 5 N. R. 15 W., Granite County, on right bank 1.5 mi.  
(2.4 km) upstream from tail out structure in Trout Creek, 6.6 mi.  
(10.6 km) downstream from headgate which is at river mile 9.8  
(15.8 km) upstream from mouth of East Fork Rock Creek, 12 mi.  
(19 km) southwest of Philipsburg.

DRAINAGE AREA -- Above headgate - 31 sq. mi. (80 sq. km).

GAGE -- Water stage recorder. Altitude of gage 5,900 ft. (1,798 m)  
from topography map.

AVERAGE DISCHARGE -- 1961 to 1976 - 15,250 AF/season (18.8 cu.  
hm/season).

EXTREMES -- Period of record: Maximum discharge, 143 ft.  $^3/s$   
(4.05 m  $^3/s$ ), August 11 to 14, 1963. Minimum dishcarge,  
no flow at times.

REMARKS -- Records good.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJC2089

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1961

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					0	68	132	104				
2					0	68	132	101				
3					0	70	132	101				
4					0	73	132	99				
5					0	68	128	101				
6					0	58	128	101				
7					0	67	128	101				
8					0	76	121	cc				
9					0	79	114	101				
10					0	85	114	106				
11					0	90	111	128				
12					0	66	101	128				
13					0	81	95	126				
14					0	81	86	128				
15					0	85	86	128				
16					0	92	86	128				
17					0	93	86	116				
18					0	95	86	95				
19					0	99	88	79				
20					0	101	92	65				
21					0	104	104	54				
22					0	106	129	46				
23					12	109	129	20				
24					50	114	122	20				
25					50	116	119	0				
26					49	116	116	0				
27					64	114	116	0				
28					81	116	116	0				
29					65	132	116	0				
30					66	132	119	0				
31					68	-----	111	0				
TOTAL					505	2,774	3,475	2,277				
MEAN					16.3	92.5	112	73.5				
MAX					81	132	132	128				
MIN					0	58	86	0				
AC-FT					1,000	5,500	6,890	4,520				

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJD2089

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1962

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1						18	107	98	46			
2						16	109	87	48			
3						18	114	84	52			
4						18	117	82	52			
5						56	117	82	56			
6						33	112	74	63			
7						31	102	72	63			
8						31	107	79	61			
9						33	112	84	59			
10						36	112	87	61			
11						42	107	82	63			
12						35	109	74	63			
13						39	104	61	52			
14						35	92	48	38			
15						36	82	50	31			
16						33	79	59	18			
17						33	74	74	16			
18						35	65	72	11			
19						40	59	68	11			
20						40	59	70	11			
21						40	56	70	11			
22						40	52	72	11			
23						40	70	72	11			
24						52	112	72	11			
25						56	117	70	11			
26						77	114	61	11			
27						77	107	59	11			
28						74	102	52	11			
29						74	104	44	11			
30						82	104	46	6.0			
31						-----	102	46	-----			
TOTAL						1,276	2,974	2,153	990.0			
MEAN						42.5	96.1	69.5	32.7			
MAX						82	117	98	63			
MIN						18	52	44	6.0			
AC-FT						2,530	5,010	4,270	1,940			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1963

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	70	68	72	56			
2					0	68	65	82	50			
3					0	72	68	82	35			
4					0	70	68	54	28			
5					0	59	68	94	29			
6					0	54	61	57	35			
7					0	52	56	112	40			
8					0	46	56	117	36			
9					0	44	54	124	33			
10					0	38	52	140	31			
11					0	25	44	143	28			
12					0	33	38	143	28			
13					0	35	35	143	26			
14					0	0	38	143	20			
15					0	40	40	140	17			
16					0	44	38	138	15			
17					0	44	35	138	11			
18					0	46	35	138	11			
19					0	52	36	138	11			
20					0	59	40	135	12			
21					15	59	44	135	12			
22					31	68	54	129	9.0			
23					31	70	84	127	11			
24					29	70	99	122	9.0			
25					29	68	102	114	9.0			
26					29	70	104	104	9.0			
27					32	74	102	99	9.0			
28					40	77	57	64	9.0			
29					50	77	64	89	9.0			
30					50	68	84	77	9.0			
31					59	-----	82	68	-----			-----
TOTAL					396	1,652	1,941	3,581	647.0			
MEAN					12.8	55.1	62.6	116	21.6			
MAX					59	77	104	143	56			
MIN					0	0	35	68	9.0			
AC-FT					785	3,280	3,850	7,100	1,280			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1964

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						30	44	84	74			
2						29	50	65	70			
3						40	50	65	70			
4						50	50	61	70			
5						63	48	52	61			
6							61	24	48			
7							59	12	50	46		
8							59	33	63	42		
9							59	56	63	35		
10							59	59	65	20		
11							54	59	69	20		
12							48	59	69	20		
13							50	59	69	20		
14							52	56	69	20		
15							52	54	69	20		
16							52	48	69	20		
17							40	50	69	20		
18							20	50	77	20		
19							21	46	74	20		
20							21	44	65	15		
21							21	38	63	10		
22							21	37	61	10		
23							21	37	61	9.0		
24							21	37	63	5.0		
25							21	46	72	5.0		
26							24	54	72	5.0		
27							31	54	72	5.0		
28							33	65	74	5.0		
29							36	68	77	5.0		
30							42	76	77	5.0		
31							87	77	-----	-----		
TOTAL							1,190	1,553	2,090	795.0		
MEAN							39.7	50.1	67.4	26.5		
MAX							63	87	84	74		
MIN							20	12	50	5.0		
AC-FT							2,360	3,080	4,150	1,580		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1965

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							49	89	14			
2							49	84	18			
3							49	77	18			
4							49	74	23			
5							51	74	23			
6							63	74	23			
7							72	72	23			
8							79	56	28			
9							79	56	31			
10							77	56	31			
11							74	56	31			
12							70	52	31			
13							63	54	23			
14							60	50	0			
15							59	48	0			
16							52	54	0			
17							35	56	0			
18							35	46	0			
19							44	46	0			
20							46	44	0			
21							46	44	0			
22							46	44	0			
23							48	31	0			
24							52	7.0	0			
25							50	7.0	0			
26							46	0	0			
27							40	0	0			
28							44	0	0			
29		-----					54	7.0	0			
30		-----					65	0	0			
31		-----					89	14	-----			
TOTAL							1,735	1,372.0	317			
MEAN							56.0	44.3	10.6			
MAX							89	89	31			
MIN							35	0	0			
AU-FT							3,440	2,720	629			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1966

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	84	40	102	10			
2					0	82	40	117	0			
3					0	79	40	124	0			
4					0	79	40	107	0			
5					0	79	42	104	0			
6					0	68	48	104	0			
7					0	54	50	102	0			
8					0	54	50	99	0			
9					0	54	52	97	0			
10					0	54	56	97	0			
11					0	48	52	102	0			
12					0	40	46	104	0			
13					0	40	36	97	0			
14					0	35	36	94	0			
15					0	33	38	89	0			
16					0	31	50	92	0			
17					0	24	50	107	0			
18					10	28	50	107	0			
19					20	28	65	112	0			
20					32	28	92	117	0			
21					70	28	94	117	0			
22					82	29	97	94	0			
23					86	29	102	89	0			
24					86	29	104	87	0			
25					104	26	104	77	0			
26					107	28	89	70	0			
27					104	31	89	68	0			
28					104	38	89	56	0			
29		-----			107	42	89	38	0			
30		-----			112	40	94	26	0			
31		-----			99	-----	97	21	-----			
TOTAL					1,123	1,344	2,021	2,817	10			
MEAN					36.2	44.8	65.2	90.9	.33			
MAX					112	84	104	124	10			
MIN					0	24	36	21	0			
AU-FT					2,230	2,670	4,010	5,500	20			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1967

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	65	56	117			
2						0	59	65	117			
3						1.9	63	72	124			
4						12	61	72	122			
5						9.0	63	72	122			
6						5.3	61	74	122			
7						0	56	74	122			
8						3.3	50	74	119			
9						9.0	36	72	119			
10						11	38	59	124			
11						12	44	46	127			
12						12	61	61	127			
13						14	59	59	104			
14						14	56	65	102			
15						12	63	89	87			
16						12	65	99	68			
17						17	65	99	65			
18						35	70	99	52			
19						35	72	97	36			
20						35	72	69	35			
21						46	65	84	35			
22						48	48	84	24			
23						48	42	89	9.0			
24						48	44	102	7.8			
25						50	48	102	9.0			
26						52	56	104	12			
27						59	59	112	17			
28						63	56	112	18			
29						68	56	117	18			
30						70	56	117	20			
31						-----	56	114	-----			
TOTAL						801.5	1,765	2,630	2,180.8			
MEAN						26.7	56.5	84.6	72.7			
MAX						70	72	117	127			
MIN						0	36	46	7.8			
AC-FT						1,590	3,500	5,220	4,330			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	9.0	87	50	29			
2					0	9.0	82	63	29			
3					0	17	74	70	29			
4					0	35	77	70	31			
5					0	42	77	70	33			
6					0	56	74	70	36			
7					0	59	68	63	48			
8					0	59	65	63	56			
9					0	59	65	62	59			
10					0	59	68	65	50			
11					0	59	68	72	59			
12					0	61	65	72	59			
13					0	59	65	70	59			
14					0	59	68	72	59			
15					0	59	74	72	59			
16					0	59	68	72	44			
17					0	61	68	72	26			
18					0	59	68	74	26			
19					0	59	68	61	35			
20					0	63	65	38	36			
21					0	65	65	38	36			
22					0	70	65	33	35			
23					0	70	65	33	35			
24					0	72	68	31	35			
25					0	74	65	31	35			
26					0	79	36	31	35			
27					1.4	82	33	33	35			
28					9.0	84	44	31	35			
29					9.0	87	42	28	35			
30					9.0	87	42	28	33			
31					9.0	-----	46	20	-----			
TOTAL					374	1,772.0	1,985	1,668	1,220			
MEAN					1.21	59.1	64.0	53.8	40.7			
MAX					9.0	87	87	74	59			
MIN					0	9.0	33	28	26			
AC-FT					74	3,510	3,940	3,310	2,420			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	63	0	36	124			
2					0	61	0	46	124			
3					0	61	0	72	124			
4					0	72	0	102	122			
5					0	82	0	112	117			
6					0	82	0	119	112			
7					0	87	0	117	112			
8					0	84	0	117	106			
9					0	84	0	117	109			
10					0	92	0	117	107			
11					0	89	0	114	107			
12					0	84	0	122	107			
13					0	79	11	122	114			
14					0	72	40	119	114			
15					0	72	61	114	114			
16					0	84	68	112	109			
17					0	84	70	104	84			
18					0	87	77	106	87			
19					0	84	84	112	87			
20					2.0	84	84	124	59			
21					4.0	87	84	114	56			
22					4.0	84	84	109	56			
23					4.0	84	68	117	56			
24					5.0	7.0	54	117	59			
25					3.0	0	48	114	59			
26					7.8	0	46	117	56			
27					29	0	46	117	56			
28					31	0	46	117	56			
29					38	0	38	117	56			
30					56	0	35	117	48			
31					-----	63	-----	35	122	-----	-----	-----
TOTAL					246.8	1,849.0	1,079	3,350	2,700			
MEAN					7.96	61.6	34.8	109	90.0			
MAX					63	92	84	124	124			
MIN					0	0	0	36	48			
AC-FT					490	3,670	2,140	6,720	5,360			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						84	44	50	117			
2						84	44	50	112			
3						84	44	44	112			
4						89	44	23	112			
5						89	44	21	112			
6						92	48	21	119			
7						93	54	20	119			
8						93	54	20	114			
9						89	54	20	102			
10						92	56	17	99			
11						97	56	15	99			
12						99	56	23	99			
13						102	56	31	99			
14						97	61	49	92			
15						93	54	54	71			
16						97	50	79	74			
17						102	50	87	74			
18						102	50	97	79			
19						102	52	97	77			
20						99	63	99	77			
21						102	65	90	74			
22						104	70	99	79			
23						104	70	97	84			
24						99	70	99	49			
25						93	59	104	0			
26						97	44	104	0			
27						99	44	112	0			
28						93	46	112	0			
29						70	46	106	0			
30						42	46	106	0			
31						50	114	-----	-----			
TOTAL						2,782	1,644	2,079	2,248			
MEAN						92.7	53.0	67.1	74.0			
MAX						104	70	114	119			
MIN						42	44	15	0			
AC-FT						5,520	3,260	4,120	4,460			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	86	116	109	46			
2					0	86	126	109	44			
3					0	86	126	109	44			
4					0	89	116	104	44			
5					35	89	84	99	44			
6					72	86	89	96	33			
7					72	79	86	94	0			
8					72	82	84	82	0			
9					72	82	82	63	0			
10					72	82	82	58	0			
11					74	82	94	56	0			
12					0	79	c4	56	0			
13					56	79	92	54	0			
14					79	82	86	52	0			
15					79	99	84	50	0			
16					89	96	86	35	0			
17					96	96	102	0	0			
18					94	104	104	0	0			
19					94	104	102	0	0			
20					92	104	90	0	0			
21					92	104	99	0	0			
22					92	107	116	0	0			
23					96	114	116	0	0			
24					96	116	116	0	0			
25					99	116	114	0	0			
26					99	116	114	0	0			
27					96	116	116	7.8	0			
28					89	116	114	24	0			
29					89	116	114	24	0			
30					86	114	112	22	0			
31					-----	114	109	-----	0	-----		
TOTAL					2,082	3,024	3,174	1,303.8	255			
MEAN					69.4	97.5	102	43.5	8.23			
MAX					99	116	126	109	46			
MIN					0	79	82	0	0			
AC-FT					4,130	6,000	6,300	2,590	506			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	54	68	87	102			
2					0	52	68	87	102			
3					0	48	65	87	99			
4					0	56	68	87	99			
5					0	61	68	84	102			
6					0	72	70	84	99			
7					0	79	70	84	94			
8					0	79	63	84	92			
9					0	82	54	82	79			
10					0	84	56	74	54			
11					0	84	63	72	50			
12					0	84	65	82	42			
13					0	87	68	97	29			
14					0	87	65	97	38			
15					0	89	68	97	35			
16					0	92	65	94	18			
17					0	99	68	94	18			
18					0	104	70	92	11			
19					0	102	79	87	0			
20					0	102	87	87	8.8			
21					0	102	87	89	21			
22					0	97	72	97	21			
23					0	94	63	94	21			
24					0	89	63	92	21			
25					0	89	63	89	13			
26					0	84	77	89	0			
27					0	79	84	87	0			
28					0	74	84	89	0			
29					0	63	84	97	0			
30					0	65	84	c4	0			
31					29	-----	84	97	-----			
TOTAL					29	2,433	2,193	2,753	1,268.8			
MEAN					.94	81.1	70.7	88.8	42.3			
MAX					29	104	87	97	102			
MIN					0	48	54	72	0			
AC-FT					58	4,830	4,350	5,460	2,520			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

## DISCHARGE, IN CUBIC FEET PER SECND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	104	92		0			
2					0	104	87		0			
3					0	107	79		0			
4					0	104	74		0			
5					0	104	63		0			
6					0	102	56		0			
7					0	55	44		1.4			
8					0	102	36		11			
9					0	102	35		0			
10					0	102	31		0			
11					0	102	26		0			
12					4.0	102	20		0			
13					14	104	17		0			
14					38	104	15		0			
15					68	104	7.9		0			
16					74	99	7.3		0			
17					89	94	14		5.0			
18					92	92	7.5		12			
19					97	89	0		12			
20					92	89	0		3.5			
21					107	94	3.9		0			
22					82	92	14		0			
23					77	89	12		0			
24					74	87	0		0			
25					72	92	2.8		0			
26					72	99	20		1.7			
27					72	97	9.8		15			
28					72	94	0		7.9			
29					72	92	0		0			
30					77	92	0		0			
31					97	-----	0		-----			
TOTAL					1,442.0	2,937	774.2	0	69.5			
MEAN					46.5	97.9	25.0	0	2.32			
MAX					107	107	92	0	15			
MIN					0	87	0	0	0			
AC-FT					2,860	5,830	1,540	0	138			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

## DISCHARGE, IN CUBIC FEET PER SECND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	15	101	107	79			
2					0	21	101	104	76			
3					0	27	101	107	77			
4					0	40	101	107	74			
5					0	40	99	107	74			
6					0	44	97	111	74			
7					0	50	94	109	74			
8					0	48	94	109	74			
9					0	48	87	109	74			
10					0	54	87	104	61			
11					0	67	89	99	79			
12					0	72	89	99	81			
13					0	89	89	99	77			
14					0	94	89	99	77			
15					0	101	89	94	77			
16					0	101	87	89	79			
17					0	101	81	89	79			
18					0	101	87	94	67			
19					0	101	89	94	67			
20					0	104	91	89	65			
21					0	104	91	90	65			
22					0	101	94	87	61			
23					0	99	87	87	61			
24					0	101	89	87	59			
25					0	104	104	84	54			
26					0	104	114	84	44			
27					0	101	119	84	44			
28					5.0	99	121	84	42			
29					17	99	117	81	44			
30					26	99	111	81	46			
31					18	-----	109	81	-----			
TOTAL					0	66.0	2,329	3,008	2,948	2,003		
MEAN					0	2.13	77.6	97.0	95.1	66.0		
MAX					0	26	104	121	111	91		
MIN					0	0	15	81	81	42		
AC-FT					0	131	4,620	5,970	5,850	3,980		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJC2089

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	65	52	68	72		
2						0	68	82	68	70		
3						0	82	63	68	70		
4						0	92	40	68	70		
5						0	84	40	68	70		
6						0	94	38	68	61		
7						0	89	38	68	0		
8						0	87	38	63	0		
9						0	92	36	61	0		
10						0	89	38	50	0		
11						0	87	38	59	0		
12						0	84	36	50	0		
13						31	84	39	72	0		
14						33	97	48	74	0		
15						56	94	68	74	0		
16						65	94	68	74	0		
17						56	89	65	74	0		
18						56	87	65	74	0		
19						44	84	63	72	0		
20						26	82	61	72	0		
21						26	102	63	72	0		
22						26	97	63	70	0		
23						26	97	63	70	0		
24						24	97	63	72	0		
25						29	97	65	72	0		
26						35	97	68	72	0		
27						38	104	68	74	0		
28						42	99	68	74	0		
29						44	79	68	74	0		
30						56	77	68	74	0		
31						-----	82	68	-----	0	-----	-----
TOTAL						0	713	2,752	1,770	2,078	413	
MEAN						0	23.8	88.8	57.1	69.3	13.3	
MAX						0	65	104	82	74	72	
MIN						0	0	65	36	50	0	
AC-FT						0	1,410	5,460	3,510	4,120	819	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

MAIN CANAL BELOW COUNTY BRIDGE

NUMBER 76GJ02089

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	70	74	46			
2						0	70	74	46			
3						0	70	74	40			
4						21	70	74	31			
5						35	65	77	31			
6						40	61	77	31			
7						68	84	77	35			
8						68	84	77	54			
9						68	84	77	56			
10						65	107	77	56			
11						65	104	74	56			
12						70	104	74	56			
13						72	104	74	56			
14						72	109	72	55			
15						68	119	63	63			
16						68	114	28	63			
17						68	112	65	63			
18						74	104	52	65			
19						84	104	56	61			
20						84	104	63	61			
21						84	109	63	54			
22						64	99	63	54			
23						84	84	72	54			
24						89	92	56	54			
25						89	89	50	54			
26						74	79	42	46			
27						70	54	42	35			
28						72	52	44	35			
29						77	52	46	35			
30						77	59	46	35			
31						-----	72	46	-----	-----	-----	-----
TOTAL						0	0	1,890	2,684	1,949	1,485	
MEAN						0	0	63.0	86.6	62.9	49.5	
MAX						0	0	89	119	77	65	
MIN						0	0	0	52	28	31	
AC-FT						0	0	3,750	5,320	3,870	2,950	



76GJ 04000 Marshall Canal below headgate near Philipsburg, MT

LOCATION -- Lat.  $46^{\circ} 13' 52''$ , long  $113^{\circ} 21' 55''$ , in SW $\frac{1}{4}$  SW $\frac{1}{4}$  NW $\frac{1}{4}$  sec. 33, T. 6 N. R. 14 W., Granite County, on left bank 0.1 mi. (0.2 km) downstream from headgate which is at river mile 4.5 (7.2 km) upstream from mouth of Trout Creek, 8 mi. (13 km) southwest of Philipsburg.

DRAINAGE AREA -- Above headgate - 28 sq. mi. (72.5 sq. km).

GAGE -- Water stage recorder. Altitude of gage 5,360 ft. (1,634 m) from topography map.

AVERAGE DISCHARGE -- 1961 to 1976 - 5,340 AF/season (6.6 cu. hm/season).

EXTREMES -- Period of record: Maximum discharge, 70 ft.  $^3/s$  (1.98 m  $^3/s$ ), June 29, 1968. Minimum discharge, no flow at times.

REMARKS -- Record good except for periods of extreme moss growth.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

MARSHALL CANAL BELOW HEAD GATE

NUMBER 766JC400C

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1961

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	14	37	19				
2					0	12	37	18				
3					0	14	37	18				
4					0	20	37	18				
5					0	17	37	18				
6					0	3.8	37	18				
7					0	17	37	18				
8					0	25	37	18				
9					0	26	34	19				
10					0	29	34	21				
11					0	32	32	22				
12					0	34	32	23				
13					0	32	28	23				
14					0	32	25	25				
15					0	34	16	27				
16					0	40	18	27				
17					0	40	18	27				
18					0	44	19	25				
19					0	44	19	23				
20					0	44	19	21				
21					0	44	21	17				
22					0	47	21	12				
23					0	47	22	9.5				
24					0	34	22	9.5				
25					0	28	22	9.5				
26					0	26	10	9.5				
27					3.3	29	12	9.5				
28					29	29	18	9.5				
29					14	34	19	9.5				
30					14	34	19	9.5				
31					15	-----	19	9.5	-----	-----	-----	-----
TOTAL					75.3	905.8	797	542.5				
MEAN					2.43	30.2	25.7	17.5				
MAX					29	47	37	27				
MIN					0	3.8	10	9.5				
AC-FT					149	1,800	1,580	1,080				

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

MARSHALL CANAL BELOW HEAD GATE

NUMBER 766J04000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1962

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					11	40	18	31				
2					11	37	16	30				
3					11	37	16	31				
4					11	35	16	31				
5					16	35	16	32				
6					13	35	16	35				
7					9.5	35	14	37				
8					3.6	38	14	32				
9					0	38	14	27				
10					0	38	15	26				
11					11	39	14	27				
12					13	40	11	27				
13					15	39	6.8	26				
14					13	35	6.7	24				
15					13	33	6.5	24				
16					13	33	11	7.8				
17					13	25	16	7.8				
18					13	14	14	7.8				
19					11	13	14	6.0				
20					11	16	15	7.8				
21					9.5	14	17	6.0				
22					9.5	13	17	6.0				
23					9.5	12	19	6.0				
24					11	16	20	6.0				
25					18	17	21	6.0				
26					26	17	22	7.8				
27					38	15	9.4	6.5				
28					37	15	13	7.8				
29					37	15	28	9.5				
30					38	17	20	6.5				
31					-----	17	21	-----	-----	-----	-----	-----
TOTAL					445.6	823	406.4	543.3				
MEAN					14.9	26.5	16.0	18.1				
MAX					38	40	31	31				
MIN					0	12	5.5	6.0				
AC-FT					684	1,530	985	1,080				

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MARSHALL CANAL BELOW HEAD GATE

NUMBER 76GJC4000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1963

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	32	19	15	19			
2					0	32	19	16	21			
3					0	35	19	21	18			
4					0	35	19	26	16			
5					0	32	23	26	16			
6					0	30	26	24	18			
7					0	29	29	26	19			
8					0	27	27	26	18			
9					0	26	27	27	18			
10					0	24	26	29	18			
11					0	7.8	19	27	16			
12					0	11	13	27	16			
13					0	16	9.5	29	18			
14					0	0	9.5	29	16			
15					0	14	11	29	16			
16					0	21	11	29	9.5			
17					0	21	11	29	0			
18					0	18	7.8	32	0			
19					0	19	4.0	35	0			
20					0	27	6.0	37	0			
21					0	32	7.8	38	0			
22					27	27	9.5	38	0			
23					27	27	9.5	40	0			
24					24	29	9.5	40	0			
25					24	27	9.5	27	0			
26					24	29	7.8	30	0			
27					24	35	6.0	29	0			
28					23	37	6.0	27	0			
29		-----			24	29	6.0	23	0			
30		-----			23	19	9.5	16	0			
31		-----			26	-----	13	16	-----			
TOTAL					246	747.8	429.9	873	272.5			
MEAN					7.94	24.9	13.9	28.2	9.08			
MAX					27	37	29	40	21			
MIN					0	0	4.0	15	0			
AC-FT					488	1,480	853	1,730	541			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MARSHALL CANAL BELOW HEAD GATE

NUMBER 76GJ04000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1964

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					27	24	19	27				
2					27	32	18	30				
3					26	19	1c	32				
4					24	9.5	18	30				
5					30	24	16	21				
6					35	30	14	2.0				
7					40	16	11	4.0				
8					40	14	13	2.0				
9					37	33	11	4.0				
10					35	35	14	2.0				
11					35	38	16	2.0				
12					33	43	18	2.0				
13					30	43	18	2.0				
14					27	41	18	2.0				
15					29	41	19	2.0				
16					30	40	23	2.0				
17					26	38	23	2.0				
18					7.5	38	23	2.0				
19					13	37	16	2.0				
20					13	35	9.5	2.0				
21					14	32	7.5	2.0				
22					13	26	7.5	2.0				
23					5.7	21	7.5	2.0				
24					5.7	21	7.5	2.0				
25					5.7	26	11	2.0				
26					7.5	32	14	2.0				
27					7.5	29	14	2.0				
28					7.5	27	18	2.0				
29					7.5	27	21	2.0				
30		-----			14	29	24	2.0				
31		-----			-----	24	24	-----				
TOTAL					652.6	924.5	492.5	194.0				
MEAN					21.8	29.8	15.9	6.47				
MAX					40	43	24	32				
MIN					5.7	9.5	7.5	2.0				
AC-FT					1,290	1,830	977	385				

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MARSHALL CANAL BELOW HEAD GATE

NUMBER 76GJ04000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1965

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						19	38	23	16			
2						19	37	23	18			
3						19	37	23	18			
4						19	38	23	19			
5						19	40	23	19			
6						19	41	21	19			
7						19	46	23	19			
8						19	50	21	21			
9						23	50	21	21			
10						26	49	21	23			
11						30	50	23	23			
12						35	47	23	23			
13						38	43	23	23			
14						40	41	21	21			
15						40	37	21	9.5			
16						38	37	21	4.0			
17						37	32	23	4.0			
18						32	29	21	4.0			
19						32	30	21	4.0			
20						30	30	21	4.0			
21						27	30	23	4.0			
22						23	29	23	4.0			
23						23	29	23	1.0			
24						37	30	18	1.0			
25						38	29	18	1.0			
26						38	29	13	1.0			
27						37	29	13	1.0			
28						37	30	15	1.0			
29						37	29	16	1.0			
30						37	26	16	1.0			
31						-----	23	18	-----			
TOTAL						887	1,115	636	328.5			
MEAN						29.6	36.0	20.5	11.0			
MAX						40	50	23	23			
MIN						19	23	13	1.0			
AC-FT						1,760	2,210	1,260	652			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MARSHALL CANAL BELOW HEAD GATE

NUMBER 76GJ04000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1966

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					4.2	37	23	21	24			
2					4.2	37	26	26	18			
3					4.2	38	30	30	9.5			
4					4.2	37	29	30	9.5			
5					4.2	37	32	27	9.5			
6					4.2	35	38	24	7.8			
7					4.2	33	41	23	9.5			
8					4.2	35	43	19	7.8			
9					4.2	38	43	19	9.5			
10					4.2	40	46	19	7.8			
11					4.2	38	46	19	7.8			
12					4.2	29	40	19	7.8			
13					4.2	24	35	19	7.8			
14					4.2	19	33	19	7.8			
15					4.2	19	33	19	7.8			
16					4.2	19	32	19	7.8			
17					4.2	18	30	21	7.8			
18					4.2	18	30	23	7.8			
19					4.2	18	24	24	7.8			
20					4.2	19	15	27	7.8			
21					7.8	19	21	10	7.8			
22					21	19	26	0	7.8			
23					22	19	26	12	7.8			
24					22	19	26	26	7.8			
25					30	19	26	20	7.8			
26					32	19	23	29	7.8			
27					33	19	23	29	7.8			
28					35	21	21	29	7.8			
29					37	23	23	27	7.8			
30					37	23	23	26	7.8			
31					38	-----	21	24	-----			
TOTAL					398.8	788	928	688	268.9			
MEAN					12.9	26.3	29.9	22.2	8.96			
MAX					38	40	46	30	24			
MIN					4.2	18	15	0	7.8			
AC-FT					791	1,560	1,840	1,360	533			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

MARSHALL CANAL BELOW HEAD GATE

## - WATER RESOURCES DIVISION

NUMBER 76GJ04000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1967

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					3.7	40	14	34				
2					7.3	36	14	34				
3					6.5	40	16	34				
4					5.8	40	19	34				
5					.10	42	20	29				
6					.75	42	20	34				
7					4.3	42	20	34				
8					5.0	42	20	34				
9					5.0	32	20	34				
10					5.0	31	20	34				
11					5.0	32	16	29				
12					8.0	42	15	27				
13					16	40	14	20				
14					15	38	17	17				
15					13	40	26	17				
16					12	36	29	16				
17					14	36	31	16				
18					27	38	31	12				
19					26	36	32	8.9				
20					24	32	32	8.0				
21					31	27	31	5.8				
22					36	23	31	5.8				
23					32	21	31	5.0				
24					31	19	32	3.0				
25					31	14	34	3.0				
26					31	15	32	3.0				
27					31	15	31	3.0				
28					32	15	29	3.0				
29					40	14	31	2.3				
30					42	14	29	3.0				
31					-----	14	34	-----				
TOTAL					540.45	948	771	542.8				
MEAN					18.0	30.6	24.9	18.1				
MAX					42	42	34	34				
MIN					.10	14	14	2.3				
AC-FT					1,070	1,880	1,530	1,080				

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

MARSHALL CANAL BELOW HEAD GATE

## - WATER RESOURCES DIVISION

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	10	53	18	14			
2					0	8.0	51	22	14			
3					0	10	51	25	14			
4					0	22	51	25	14			
5					0	22	51	26	14			
6					0	16	51	26	14			
7					0	25	51	25	14			
8					0	35	49	25	14			
9					0	37	51	25	22			
10					0	37	51	25	31			
11					0	37	51	25	31			
12					0	39	53	25	31			
13					0	39	53	25	33			
14					0	37	53	25	31			
15					0	37	55	25	31			
16					0	35	55	25	23			
17					0	39	55	25	15			
18					0	35	55	25	15			
19					0	37	55	19	15			
20					0	39	49	14	10			
21					0	41	9.0	14	0			
22					0	45	31	14	0			
23					5.7	45	43	14	0			
24					11	45	45	14	0			
25					11	47	37	14	0			
26					10	55	28	14	0			
27					8.0	60	23	14	0			
28					10	68	15	14	0			
29					11	70	13	14	0			
30					11	65	16	14	0			
31					11	-----	18	14	-----			
TOTAL					88.7	1,137.0	1,322.0	629	400			
MEAN					2.86	37.9	42.6	20.3	13.3			
MAX					11	70	55	26	33			
MIN					0	8.0	9.0	14	0			
AC-FT					176	2,260	2,620	1,250	793			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MARSHALL CANAL BELOW HEAD GATE

NUMBER 76GJ04000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					0	14	7.8	31	27			
2					0	16	7.0	38	27			
3					0	20	7.0	43	27			
4					0	25	6.4	41	25			
5					0	31	7.0	41	25			
6					0	29	8.5	38	25			
7					0	33	11	38	23			
8					0	36	8.5	36	23			
9					0	36	7.8	36	23			
10					0	41	7.8	36	21			
11					3.2	41	7.0	33	21			
12					3.2	38	7.0	33	21			
13					3.2	36	7.0	33	20			
14					3.2	27	12	33	20			
15					3.2	23	20	31	20			
16					3.2	33	25	31	13			
17					3.2	36	31	29	8.5			
18					3.2	23	31	27	9.4			
19					3.2	6.4	33	27	8.5			
20					3.2	29	33	27	9.4			
21					3.2	27	33	27	9.4			
22					3.2	27	36	27	9.4			
23					3.2	27	36	27	9.4			
24					3.2	17	33	27	9.4			
25					3.3	11	31	27	9.4			
26					4.5	11	31	27	9.4			
27					8.5	10	33	27	0			
28					7.8	9.4	33	29	0			
29					9.4	9.4	31	27	0			
30					-----	12	8.5	31	27	0		
31					-----	12	-----	33	29	-----		
TOTAL					102.3	730.7	645.8	983	453.2			
MEAN					3.30	24.4	20.8	31.7	15.1			
MAX					12	41	36	43	27			
MIN					0	6.4	6.4	27	0			
AC-FT					203	1,450	1,280	1,950	899			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MARSHALL CANAL BELOW HEAD GATE

NUMBER 76GJ04000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1						42	21	22	27			
2						45	21	22	27			
3						45	21	15	27			
4						42	21	9.9	27			
5						42	21	9.0	27			
6						42	21	12	27			
7						45	22	14	27			
8						45	22	14	24			
9						45	22	14	16			
10						55	22	14	16			
11						55	22	14	15			
12						53	21	14	13			
13						58	21	14	13			
14						55	21	14	6.8			
15						55	21	14	7.3			
16						55	19	15	1.8			
17						55	18	15	3.9			
18						55	18	14	6.8			
19						55	19	12	6.8			
20						55	19	12	6.0			
21						61	19	11	6.0			
22						61	19	13	6.0			
23						28	19	16	6.0			
24						55	19	18	6.0			
25						55	19	21	5.3			
26						55	18	24	5.3			
27						28	19	27	4.5			
28						55	19	27	4.5			
29						35	21	27	4.5			
30						21	24	27	4.5			
31						-----	22	27	-----			
TOTAL						1,453	631	521.9	373.0			
MEAN						48.4	20.4	16.8	12.4			
MAX						61	24	27	27			
MIN						21	18	9.0	1.8			
AC-FT						2,880	1,250	1,040	740			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

MARSHALL CANAL BELOW HEAD GATE

NUMBER 76GJ04000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					18	38	25	22	6.0			
2					15	40	29	24	6.0			
3					16	42	33	24	6.0			
4					16	40	31	20	6.0			
5					20	42	29	18	2.8			
6					20	40	27	18	2.8			
7					20	40	24	18	3.2			
8					20	40	22	16	0			
9					20	42	22	15	0			
10					19	40	22	15	0			
11					20	40	24	15	0			
12					4.5	33	24	15	0			
13					8.2	29	24	15	0			
14					22	29	22	15	0			
15					22	29	22	15	0			
16					25	25	20	14	0			
17					33	24	24	12	0			
18					35	25	22	12	0			
19					38	25	20	12	0			
20					38	29	20	12	0			
21					38	29	20	12	0			
22					38	29	20	11	0			
23					38	31	22	11	0			
24					35	29	20	11	0			
25					35	31	20	11	0			
26					38	29	22	11	0			
27					40	29	24	12	0			
28					40	31	24	12	0			
29					40	27	22	12	0			
30					38	22	24	9.9	0			
31					-----	24	24	-----	0	-----		
TOTAL					809.7	1,003	728	439.9	32.8			
MEAN					27.0	32.4	23.5	14.7	1.06			
MAX					40	42	33	24	6.0			
MIN					4.5	22	20	9.9	0			
AC-FT					1,610	1,990	1,440	873	65			

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## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

MARSHALL CANAL BELOW HEAD GATE

NUMBER 76GJ04000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	13	29	35	19			
2					0	19	29	35	19			
3					0	16	29	35	19			
4					0	22	29	35	19			
5					0	21	29	33	19			
6					0	27	29	31	19			
7					0	19	25	29	19			
8					0	19	19	25	19			
9					0	29	18	25	15			
10					0	35	22	25	11			
11					0	38	29	27	6.8			
12					0	40	29	24	3.9			
13					0	40	27	24	2.8			
14					0	40	19	24	6.0			
15					0	43	12	25	12			
16					0	40	24	25	11			
17					0	45	22	25	11			
18					0	50	22	25	11			
19					0	50	21	24	9.9			
20					0	50	25	25	9.9			
21					0	50	33	21	11			
22					0	50	29	21	12			
23					0	50	27	21	12			
24					0	50	27	21	12			
25					0	50	25	19	9.0			
26					0	48	25	19	5.3			
27					0	43	25	18	5.3			
28					0	38	25	18	2.6			
29					0	29	27	19	0			
30					3.0	29	27	19	0			
31					8.0	-----	29	19	-----			
TOTAL					11.0	1,093	787	771	331.5	0		
MEAN					.35	36.4	25.4	24.9	11.1	0		
MAX					8.0	50	33	35	19	0		
MIN					0	13	12	18	0	0		
AC-FT					22	2,170	1,560	1,530	658	0		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MARSHALL CANAL BELOW HEAD GATE

NUMBER

76GJ04000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	41	29					
2					0	33	29					
3					0	29	27					
4					0	29	27					
5					0	29	26					
6					0	29	21					
7					0	29	19					
8					0	29	18					
9					0	29	17					
10					0	31	15					
11					0	33	14					
12					0	33	9.8					
13					0	36	7.5					
14					0	36	7.5					
15					0	38	7.5					
16					0	36	7.5					
17					0	36	7.5					
18					3.7	36	5.6					
19					13	36	0					
20					14	31	0					
21					21	31	0					
22					29	31	0					
23					36	31	0					
24					43	29	0					
25					51	29	0					
26					51	29	0					
27					48	29	0					
28					48	29	0					
29		-----			48	29	0					
30		-----			46	29	0					
31		-----			41	-----	0	-----	-----	-----	-----	-----
TOTAL					492.7	955	294.9	0	0			
MEAN					15.9	31.8	9.51	0	0			
MAX					51	41	29	0	0			
MIN					0	29	0	0	0			
AC-FT					977	1,890	585	0	0			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## MARSHALL CANAL BELOW HEAD GATE

NUMBER

76GJ04000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	3.0	51	27	13			
2					0	2.0	53	27	13			
3					0	3.5	53	27	13			
4					0	9.0	53	27	11			
5					0	11	53	25	11			
6					0	15	51	27	11			
7					0	17	51	27	11			
8					0	15	48	27	11			
9					0	17	41	25	11			
10					0	18	43	22	11			
11					0	24	43	22	11			
12					0	24	45	22	7.5			
13					0	33	41	22	7.5			
14					0	41	31	22	7.5			
15					0	48	21	21	7.5			
16					0	48	15	19	9.0			
17					0	48	17	19	1			
18					0	48	18	19	11			
19					0	48	18	19	11			
20					0	53	18	21	11			
21					0	53	19	21	13			
22					0	51	19	18	13			
23					0	51	21	15	13			
24					0	48	22	15	13			
25					0	48	21	15	13			
26					0	51	21	15	13			
27					0	48	21	15	13			
28		-----			0	48	19	13	13			
29		-----			3.1	48	21	13	13			
30		-----			5.3	48	21	13	13			
31		-----			4.0	-----	25	13	-----	-----	-----	-----
TOTAL					0	12.4	1,019.5	994	633	340.0		
MEAN					0	.40	34.0	32.1	20.4	11.3		
MAX					0	5.3	53	53	27	13		
MIN					0	0	2.0	1.5	1.3	7.5		
AV-FT					0	25	2,020	1,970	1,260	674		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MARSHALL CANAL BELOW HEAD GATE

NUMBER 76GJ04000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	18	19	13	26		
2						0	21	9.0	13	17		
3						0	36	9.0	12	17		
4						0	48	8.3	12	17		
5						0	16	8.3	12	17		
6						0	5.3	8.3	12	17		
7						0	8.3	9.0	12	5.3		
8						0	24	15	11	0		
9						0	33	16	11	0		
10						0	43	18	11	0		
11						0	48	24	11	0		
12						0	46	29	11	0		
13						3.1	48	31	12	0		
14						15	59	31	12	0		
15						11	31	27	16	0		
16						5.3	7.5	27	18	0		
17						4.5	43	27	19	0		
18						4.5	48	27	18	0		
19						5.3	48	24	19	0		
20						5.3	48	22	19	0		
21						4.5	56	21	21	0		
22						3.5	48	22	24	0		
23						3.0	48	22	29	0		
24						3.0	41	21	29	0		
25						3.0	43	18	29	0		
26						6.0	43	13	29	0		
27						6.8	46	13	31	0		
28						9.0	46	14	31	0		
29						11	31	13	31	0		
30						15	21	13	31	0		
31						-----	22	13	-----	0		
TOTAL						0	118.8	1,124.1	571.9	559	116.3	
MEAN						0	3.96	36.3	18.4	18.6	3.75	
MAX						0	15	59	31	31	26	
MIN						0	0	5.3	8.3	11	0	
AC-FT						0	236	2,230	1,130	1,110	231	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## MARSHALL CANAL BELOW HEAD GATE

NUMBER 76GJ04000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	3.0	6.8	11	15		
2						0	2.0	6.8	11	15		
3						0	4.5	6.8	11	14		
4						0	9.0	6.8	11	13		
5						0	11	6.8	11	13		
6						0	12	6.8	11	13		
7						0	15	11	11	13		
8						0	9.0	17	11	12		
9						0	8.3	26	12	9.8		
10						0	7.5	19	13	9.8		
11						0	7.5	41	22	14		
12						0	7.5	41	24	16		
13						0	8.3	43	22	16		
14						0	8.3	43	22	16		
15						0	7.5	46	22	16		
16						0	7.5	43	19	17		
17						0	7.5	43	24	17		
18						0	7.5	43	24	17		
19						0	7.5	46	24	17		
20						0	8.3	46	24	17		
21						0	8.3	46	27	17		
22						0	6.8	46	27	17		
23						0	5.3	46	27	17		
24						0	5.3	38	24	17		
25						0	5.3	24	22	17		
26						0	5.3	17	24	17		
27						0	5.3	15	21	8.4		
28						9.0	6.8	12	15	0		
29						7.5	6.8	9.8	16	0		
30						6.0	6.8	9.8	16	0		
31						4.0	-----	9.8	16	-----		
TOTAL						0	26.5	220.7	822.2	575	401.0	
MEAN						0	.85	7.36	26.5	18.5	13.4	
MAX						0	9.0	15	46	27	17	
MIN						0	0	2.0	6.8	11	0	
AC-FT						0	53	438	1,630	1,140	795	



76GJ 05000 Trout Creek below Marshall Canal diversion near Philipsburg, MT

LOCATION -- Lat.  $46^{\circ} 13' 52''$ , long  $113^{\circ} 21' 54''$ , in SE $\frac{1}{4}$  SW $\frac{1}{4}$  NW $\frac{1}{4}$   
sec. 33, T. 6 N., R. 14 W., Granite County, on right bank 0.1 mi.  
(0.2 km) downstream from Marshall Canal headgate, at river mile  
4.4 (7.1 km), 8 mi. (13 km) southwest of Philipsburg.

DRAINAGE AREA -- 28 sq. mi. (72.5 sq. km).

GAGE -- Water stage recorder. Altitude of gage 5,360 ft. (1,634 m)  
from topography map.

AVERAGE DISCHARGE -- 1962 to 1976 - 7,080 AF/season (8.7 cu.  
hm/season).

EXTREMES -- Period of record: Maximum discharge, 134 ft.  $^3/s$   
(3.79 m  $^3/s$ ), May 16, 1975. Minimum discharge, no flow at  
times.

REMARKS -- Record good except for periods of extreme moss growth.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER

76GJ05000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1962

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					6.0	0	24	85	13	3.8	1.5	
2					6.0	0	33	74	13	1.5	1.5	
3					6.0	0	44	72	13	0	1.5	
4					6.0	0	46	70	13	0	1.5	
5					3.8	17	50	66	13	0	1.5	
6					3.8	0	48	54	15	0	1.5	
7					3.8	0	37	48	17	0	3.8	
8					6.0	3.8	46	58	24	0	3.8	
9					1.5	8.3	50	60	26	1.5	3.8	
10					0	1.5	56	68	26	1.5	3.8	
11					0	0	50	66	28	3.8	3.8	
12					0	0	52	56	28	6.0	3.8	
13					0	1.5	52	46	28	6.0	3.8	
14					0	0	39	22	17	6.0	3.8	
15					0	0	30	24	20	3.8	6.0	
16					0	0	26	24	13	3.8	8.3	
17					0	0	26	39	13	3.8	6.0	
18					0	0	30	44	8.3	3.8	8.3	
19					0	0	28	35	11	3.8	6.0	
20					0	0	24	35	11	1.5	11	
21					0	0	22	37	8.3	1.5	8.3	
22					0	0	20	39	8.3	1.5	8.3	
23					0	0	30	39	8.3	1.5	6.0	
24					0	0	75	44	8.3	1.5	6.0	
25					0	0	80	46	8.3	1.5	8.3	
26					0	0	80	42	8.3	1.5	8.3	
27					0	0	75	48	6.0	1.5	8.3	
28					0	0	75	44	6.0	1.5	6.0	
29		-----			0	0	77	17	6.0	1.5	6.0	
30		-----			0	1.5	83	15	6.0	1.5	6.0	
31		-----			0	-----	79	17	-----	1.5	-----	
TOTAL					42.9	33.6	1,487	1,434	424.1	67.1	156.5	
MEAN					1.38	1.12	48.0	46.3	14.1	2.16	5.22	
MAX					6.0	17	83	85	28	6.0	11	
MIN					0	0	20	15	6.0	0	1.5	
AC-FT					85	67	2,950	2,840	841	133	310	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER

76GJ05000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1963

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					1.5	0	62	30				
2					0	0	58	22				
3					1.5	0	42	15				
4					0	0	48	6.0				
5					0	0	50	3.8				
6					0	0	46	3.8				
7					0	0	58	8.3				
8					0	0	68	8.3				
9					0	0	70	6.0				
10					0	0	82	3.8				
11					0	0	85	1.5				
12					0	6.0	87	1.5				
13					0	3.8	88	1.5				
14					0	3.8	85	0				
15					0	3.8	82	0				
16					0	3.8	82	0				
17					0	3.8	75	13				
18					0	6.0	77	13				
19					0	8.3	74	13				
20					0	6.0	72	11				
21					0	6.0	70	13				
22					0	8.3	72	13				
23					0	37	72	11				
24					1.5	72	70	10				
25					0	77	68	10				
26					0	79	62	10				
27					0	82	54	10				
28					0	82	46	10				
29		-----			0	79	52	10				
30		-----			0	70	44	10				
31		-----			-----	64	39	-----				
TOTAL					0	4.5	701.6	2,044	274.5			
MEAN					0	.15	22.6	65.9	9.15			
MAX					0	1.5	82	88	30			
MIN					0	0	0	39	0			
AC-FT					0	8.9	1,390	4,050	544			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJC5000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1964

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						.60	8.3	77	50			
2						.60	8.3	65	28			
3						.60	20	63	28			
4						.60	30	58	28			
5						.60	22	44	39			
6						.60	8.3	42	44			
7						1.0	8.3	33	42			
8						1.2	8.3	48	39			
9						1.0	8.3	48	37			
10						.60	8.3	46	28			
11						.60	8.3	48	26			
12						.60	13	46	30			
13						.60	15	46	28			
14						.60	15	46	26			
15						.60	6.0	48	24			
16						.60	1.2	44	24			
17						1.0	1.2	46	24			
18						.60	1.2	52	24			
19						1.0	1.2	66	24			
20						.60	1.2	58	24			
21						1.3	1.2	54	20			
22						1.2	1.5	42	20			
23						1.2	11	42	20			
24						1.5	11	44	15			
25						6.0	6.0	56	15			
26						11	6.0	42	15			
27						8.3	24	44	15			
28						8.3	42	56	15			
29						11	37	52	10			
30		-----				11	54	50	10			
31		-----				-----	66	52	-----			
TOTAL						75.00	453.1	1,558	772			
MEAN						2.50	14.6	50.3	25.7			
MAX						11	66	77	50			
MIN						.60	1.2	33	10			
AC-FT						149	899	3,090	1,530			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJ05000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1965

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						0	56	3.8				
2						0	52	3.8				
3						0	48	3.8				
4						0	48	6.0				
5						0	46	6.0				
6						0	54	6.0				
7						0	78	8.3				
8						1.5	52	15				
9						1.5	48	20				
10						1.5	48	22				
11						1.5	52	22				
12						6.0	48	24				
13						3.8	44	24				
14						6.0	30	13				
15						8.3	26	28				
16						8.3	28	30				
17						1.5	35	28				
18						3.8	24	26				
19						8.3	26	24				
20						13	24	24				
21						13	22	24				
22						8.3	24	22				
23						11	26	20				
24						13	1.5	17				
25						13	1.5	17				
26						11	3.8	15				
27						13	3.8	15				
28						17	3.8	15				
29		-----				22	3.8	15				
30		-----				28	3.8	15				
31		-----				58	3.8	-----				
TOTAL						272.3	964.8	512.7				
MEAN						8.78	31.1	17.1				
MAX						58	78	30				
MIN						0	1.5	3.8				
AC-FT						540	1,010	1,020				

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJ05000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1966

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						28	3.8	52	8.3			
2						26	3.8	60	11			
3						24	3.8	60	11			
4						24	3.8	50	8.3			
5						24	3.8	48	8.3			
6						20	3.8	56	6.0			
7						11	3.8	56	6.0			
8						11	1.5	58	6.0			
9						11	1.5	58	6.0			
10						11	1.5	56	6.0			
11						11	1.5	58	6.0			
12						11	3.8	64	6.0			
13						15	1.5	58	6.0			
14						13	1.5	54	6.0			
15						8.3	3.8	52	6.0			
16						8.3	3.8	50	6.0			
17						6.0	3.8	58	6.0			
18						6.0	1.5	58	6.0			
19						3.8	13	60	6.0			
20						3.8	42	58	6.0			
21						1.5	37	77	6.0			
22						1.5	37	74	6.0			
23						1.5	50	52	6.0			
24						1.5	54	35	6.0			
25						1.5	62	28	6.0			
26						1.5	46	28	6.0			
27						1.5	46	28	6.0			
28						3.8	46	24	6.0			
29						8.3	44	20	6.0			
30						8.3	46	15	6.0			
31						-----	50	13	-----			
TOTAL						307.1	625.3	1,518	196.9			
MEAN						10.2	20.2	49.0	6.56			
MAX						28	62	77	11			
MIN						1.5	1.5	13	6.0			
AC-FT						609	1,240	3,010	391			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJ05000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1967

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						.98	2.3	36	50			
2						2.3	2.3	40	47			
3						.25	2.3	40	53			
4						5.3	2.3	40	53			
5						12	2.3	40	53			
6						13	2.3	38	56			
7						6.3	2.3	40	56			
8						8.3	2.3	38	56			
9						7.3	1.3	40	56			
10						10	1.3	36	62			
11						9.3	2.3	26	68			
12						8.3	3.3	40	82			
13						8.3	2.3	40	68			
14						3.3	2.3	38	68			
15						2.3	12	45	65			
16						1.3	1.5	47	46			
17						1.3	20	47	42			
18						2.3	20	47	40			
19						1.3	23	45	28			
20						1.3	26	40	28			
21						4.3	30	36	28			
22						10	24	36	28			
23						6.3	24	36	21			
24						4.3	24	40	20			
25						4.3	28	42	20			
26						3.3	32	45	20			
27						4.3	38	50	21			
28						6.3	38	53	20			
29						5.3	38	53	20			
30						4.3	36	53	21			
31						-----	36	53	-----			
TOTAL						157.43	495.2	1,300	1,295			
MEAN						5.25	16.0	41.9	43.2			
MAX						13	38	53	82			
MIN						.25	1.3	26	20			
AC-FT						312	982	2,580	2,571			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJ05000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					7.4	.50	15	36	19			
2					7.4	0	10	45	23			
3					7.4	.50	7.4	48	23			
4					7.4	.50	8.8	51	23			
5					8.8	.50	8.8	51	25			
6					7.4	.50	8.8	54	25			
7					7.4	4.0	5.0	48	39			
8					7.4	1.3	4.0	45	48			
9					6.0	1.3	5.0	48	45			
10					6.0	.50	5.0	48	36			
11					5.0	.50	6.0	54	36			
12					5.0	.50	7.4	51	39			
13					6.0	.50	6.0	51	36			
14					6.0	.50	8.8	54	39			
15					6.0	.50	10	54	39			
16					7.4	0	10	51	39			
17					6.0	.50	12	51	23			
18					6.0	.50	10	57	23			
19					5.0	.50	12	57	33			
20					4.0	.50	12	36	45			
21					4.0	.50	45	36	48			
22					5.0	2.0	25	33	51			
23					1.3	4.0	23	30	51			
24					.50	4.0	30	30	48			
25					.50	1.3	39	30	45			
26					.50	.50	23	30	45			
27					0	.50	23	30	45			
28					1.3	.50	33	33	48			
29					1.3	2.0	36	23	48			
30					1.3	7.4	36	21	45			
31					.50	-----	30	19	-----			
TOTAL					145.20	36.80	515.0	1,305	1,132			
MEAN					4.68	1.23	16.6	42.1	37.7			
MAX					8.8	7.4	45	57	51			
MIN					0	0	4.0	19	19			
AC-FT					288	73	1,020	2,590	2,250			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJ05000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					9.5	14	1.5	2.5	68			
2					9.5	7.0	1.5	7.0	63			
3					9.5	2.5	1.5	20	68			
4					9.5	2.5	1.5	41	68			
5					9.5	1.5	1.5	57	63			
6					9.5	1.5	1.5	60	60			
7					9.5	1.5	2.5	60	60			
8					9.5	1.5	1.5	64	60			
9					9.5	2.5	1.5	64	60			
10					8.3	4.5	1.5	60	60			
11					8.3	3.5	1.5	64	63			
12					8.3	2.5	1.5	72	72			
13					9.5	1.5	1.5	72	72			
14					9.5	1.5	1.5	72	72			
15					9.5	1.5	1.5	64	72			
16					8.3	1.5	3.5	64	63			
17					8.3	1.5	4.5	57	60			
18					9.5	1.5	8.3	57	57			
19					11	23	11	60	38			
20					14	8.3	12	60	38			
21					12	9.5	12	57	38			
22					9.5	11	11	53	38			
23					9.5	9.5	9.5	57	38			
24					11	3.5	11	60	38			
25					9.5	1.5	11	60	38			
26					5.8	1.5	9.5	60	41			
27					8.3	1.5	12	60	47			
28					7.0	1.5	12	63	47			
29					5.8	1.5	9.5	60	44			
30					11	1.5	7.0	60	44			
31					15	-----	4.5	68	-----			
TOTAL					294.4	127.8	171.8	1,735.5	1,650			
MEAN					9.50	4.26	5.54	56.0	55.0			
MAX					15	.23	12	72	72			
MIN					5.8	1.5	1.5	2.5	38			
AC-FT					584	253	341	3,440	3,270			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJ05000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					4.5	0	9.5	17	50			
2					7.0	.50	8.3	17	50			
3					11	2.5	8.3	20	53			
4					11	.50	9.5	15	57			
5					9.5	.50	11	14	57			
6					9.5	0	11	9.5	64			
7					9.5	.50	15	5.8	64			
8					8.3	.50	15	5.8	72			
9					7.0	0	15	4.5	64			
10					7.0	0	18	4.5	57			
11					7.0	0	17	2.5	60			
12					7.0	4.5	17	4.5	68			
13					7.0	7.0	18	8.3	64			
14					5.8	4.5	18	17	81			
15					5.8	4.5	15	18	76			
16					4.5	4.5	12	30	68			
17					4.5	5.8	9.5	35	60			
18					3.5	4.5	9.5	44	57			
19					3.5	3.5	12	50	60			
20					3.5	.50	18	53	57			
21					3.5	0	20	50	60			
22					3.5	0	26	17	68			
23					3.5	3.5	23	44	68			
24					3.5	4.5	21	44	53			
25					2.5	1.5	23	47	17			
26					1.5	2.5	20	47	15			
27					0	9.5	20	50	14			
28					0	9.5	23	47	14			
29					0	15	21	47	14			
30					1.5	9.5	18	47	15			
31					.50	-----	17	53	-----			
TOTAL					156.40	99.80	498.6	868.4	1,577			
MEAN					5.05	3.33	16.1	28.0	52.6			
MAX					11	15	26	53	81			
MIN					0	0	8.3	2.5	14			
AC-FT					310	198	989	1,720	3,130			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJ05000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					4.5	2.5	.50	64	64			
2					4.5	4.5	1.5	76	64			
3					4.5	3.5	3.5	81	68			
4					3.5	3.5	3.5	76	68			
5					5.8	0	3.5	53	64			
6					4.5	0	2.5	60	60			
7					3.5	0	2.5	64	64			
8					3.5	0	4.5	60	53			
9					3.5	0	5.8	60	38			
10					3.5	0	3.5	56	35			
11					3.5	0	1.5	60	35			
12					2.5	0	3.5	60	32			
13					3.5	0	5.8	60	30			
14					1.5	1.5	5.8	56	30			
15					1.5	.50	15	50	30			
16					1.5	0	18	46	28			
17					1.5	0	21	68	14			
18					1.5	.50	23	64	12			
19					1.5	.50	23	60	11			
20					1.5	.50	23	56	12			
21					2.5	.50	28	56	11			
22					2.5	.50	32	76	11			
23					2.5	3.5	44	76	11			
24					.50	5.8	46	72	9.5			
25					0	5.8	68	68	9.5			
26					0	3.5	72	64	9.5			
27					0	2.5	72	64	14			
28					0	1.5	72	64	20			
29					0	.50	76	64	20			
30					1.5	.50	86	68	21			
31					5.8	-----	81	64	-----			
TOTAL					76.60	42.10	847.90	1,966	948.5			
MEAN					2.47	1.40	27.4	63.4	31.6			
MAX					5.8	5.8	86	81	68			
MIN					0	0	.50	46	5.5			
AC-FT					152	84	1,680	3,900	1,880			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJC5000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					9.5	17	5.8	35	72			
2					11	9.5	7.0	38	72			
3					11	.50	5.8	35	76			
4					11	.50	4.5	33	76			
5					11	.50	4.5	35	81			
6					11	.50	5.8	38	81			
7					11	8.3	9.5	38	81			
8					11	21	14	38	81			
9					11	8.3	9.5	41	72			
10					11	3.5	5.8	38	47			
11					11	3.5	2.5	35	53			
12					11	2.5	5.8	38	57			
13					11	1.5	8.3	64	35			
14					9.5	1.5	12	68	35			
15					8.3	1.5	18	68	28			
16					8.3	1.5	15	64	17			
17					8.3	2.5	15	64	17			
18					8.3	4.5	17	60	17			
19					8.3	5.8	20	60	15			
20					9.5	5.8	21	60	15			
21					11	8.3	38	64	17			
22					9.5	7.0	50	76	20			
23					8.3	8.3	33	68	21			
24					9.5	8.3	30	64	21			
25					11	7.0	28	57	23			
26					11	7.0	33	57	18			
27					9.5	5.8	41	57	17			
28					9.5	8.3	41	57	20			
29					8.3	7.0	41	64	21			
30					3.5	5.8	41	64	21			
31					7.0	-----	38	64	-----			
TOTAL					300.1	172.80	620.8	1,642	1,227			
MEAN					9.68	5.76	20.0	53.0	40.9			
MAX					11	21	50	76	81			
MIN					3.5	.50	2.5	33	15			
AC-FT					595	343	1,230	3,260	2,430			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJ05000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					4.0	7.0	28	28	8.3	8.3		
2					5.7	7.0	38	26	8.3	7.0		
3					5.7	8.3	47	23	8.3	7.0		
4					7.8	8.3	47	21	8.3	7.0		
5					13	8.3	44	17	8.3	7.0		
6					16	8.3	44	15	8.3	8.3		
7					6.0	7.0	44	14	8.3	9.5		
8					7.0	8.3	41	11	8.3	11		
9					7.8	8.3	41	8.3	8.3	8.3		
10					10	8.3	38	11	8.3	8.3		
11					11	7.0	38	12	8.3	8.3		
12					17	11	35	12	8.3	8.3		
13					17	26	41	11	8.3	8.3		
14					11	44	47	11	8.3	9.5		
15					8.3	68	47	9.5	8.3	9.5		
16					9.5	72	41	9.5	8.3	9.5		
17					9.5	86	38	9.5	8.3	9.5		
18					8.3	81	35	9.5	8.3	9.5		
19					7.0	76	35	11	8.3	9.5		
20					7.0	64	33	11	8.3	11		
21					8.3	57	33	11	7.0	11		
22					12	26	30	11	7.0	11		
23					11	17	30	11	8.3	11		
24					9.5	9.5	28	11	8.3	11		
25					9.5	4.5	30	14	7.0	11		
26					9.5	5.8	30	18	7.0	11		
27					9.5	4.5	28	17	7.0	12		
28					8.3	3.5	26	15	8.3	12		
29					8.3	3.5	28	14	7.0	11		
30					8.3	8.3	28	9.5	7.0	11		
31					21	-----	8.3	7.0	-----			
TOTAL					282.8	774.7	1,093	420.1	246.9	286.6		
MEAN					9.43	25.0	36.4	13.6	7.96	9.55		
MAX					17	86	47	28	8.3	12		
MIN					4.0	3.5	26	8.3	7.0	7.0		
AC-FT					561	1,540	2,170	833	490	568		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJC05000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					7.0	5.8	5.8	57	50			
2					5.8	9.5	9.5	53	50			
3					5.8	7.0	8.3	53	47			
4					5.8	11	8.3	50	43			
5					5.8	9.5	7.0	50	43			
6					5.8	4.5	5.8	64	43			
7					7.0	4.5	5.8	64	41			
8					5.8	2.5	7.0	64	41			
9					5.8	2.5	7.0	64	43			
10					5.8	3.5	7.0	68	35			
11					5.8	4.5	9.5	64	50			
12					7.0	1.5	11	60	60			
13					7.0	5.8	12	60	53			
14					7.0	5.8	19	64	53			
15					7.0	2.5	28	57	53			
16					7.0	1.5	35	47	53			
17					7.0	2.5	28	47	50			
18					5.8	2.5	30	53	41			
19					5.8	2.5	33	53	41			
20					8.3	5.8	35	60	43			
21					8.3	5.8	38	57	38			
22					8.3	5.8	38	57	38			
23					9.5	4.5	47	60	41			
24					8.3	4.5	50	57	38			
25					8.3	4.5	47	57	35			
26					7.0	5.8	47	57	23			
27					8.3	4.5	50	57	25			
28					5.8	3.5	53	53	28			
29					7.0	4.5	60	50	28			
30					-----	15	4.5	67	50	30		
31					-----	12	-----	64	47	-----		
TOTAL					225.9	143.1	873.0	1,754	1,257			
MEAN					7.29	4.77	28.2	56.6	41.9			
MAX					15	11	67	68	60			
MIN					5.8	1.5	5.8	47	23			
AC-FT					448	284	1,730	3,480	2,490			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER 76GJC05000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	26	12	68	57			
2					0	26	11	86	57			
3					0	28	2.5	64	57			
4					0	23	18	35	53			
5					0	21	41	33	53			
6					0	20	81	30	50			
7					0	15	57	38	50			
8					2.5	14	26	33	38			
9					4.5	14	18	26	33			
10					8.3	5.8	35	23	33			
11					15	4.5	0	15	33			
12					18	2.5	0	8.3	23			
13					41	9.5	0	8.3	44			
14					60	0	4.5	12	44			
15					109	20	18	44	33			
16					134	35	64	44	2			
17					103	23	21	47	33			
18					86	28	15	44	30			
19					60	28	12	44	30			
20					38	12	10	44	30			
21					33	7.0	20	44	28			
22					30	5.8	14	47	21			
23					44	11	20	47	15			
24					38	8.3	26	50	15			
25					26	3.5	28	53	17			
26					30	0	28	64	18			
27					41	4.5	33	64	21			
28					35	3.5	35	64	23			
29					38	0	30	64	23			
30					33	5.8	72	60	23			
31					28	-----	86	60	-----			
TOTAL					0	1,055.3	404.7	838.0	1,363.6	1,013		
MEAN					0	34.0	13.5	27.0	44.0	33.8		
MAX					0	134	35	86	86	57		
MIN					0	0	0	0	8.3	15		
AC-FT					0	2,090	803	1,560	2,700	2,010		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## TROUT CREEK BELOW MARSHALL CANAL DIVERSION

NUMBER

76GJC5000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			13	20	1.5	30	57	35				
2			10	26	1.5	30	53	35				
3			14	20	1.5	30	53	30				
4			19	28	5.8	33	53	18				
5			20	21	8.3	30	53	14				
6			21	20	5.8	23	57	17				
7			21	18	14	33	72	17				
8			20	18	28	30	115	30				
9			19	18	26	11	115	35				
10			17	18	11	23	109	35				
11			21	20	11	23	92	35				
12			22	17	15	33	68	38				
13			19	15	23	35	53	35				
14			14	17	21	41	50	35				
15			17	15	14	57	47	41				
16			15	14	9.5	57	15	41				
17			15	14	11	57	35	41				
18			15	14	14	57	21	44				
19			14	14	21	60	23	41				
20			12	14	28	57	30	41				
21			12	14	30	60	33	35				
22			12	14	50	53	33	35				
23			11	14	50	38	43	35				
24			11	12	57	44	26	35				
25			8.3	17	64	57	20	35				
26			8.3	12	53	60	23	30				
27			8.3	11	47	35	30	38				
28			8.3	9.5	38	41	38	57				
29			12	1.5	35	50	41	57				
30			14	1.5	30	53	41	57				
31	-----	-----	-----	1.5	-----	60	37	-----	-----	-----	-----	-----
TOTAL			443.2	469.0	724.9	1,301	1,536	1,072				
MEAN			14.8	15.1	24.2	42.0	49.5	35.7				
MAX			22	28	64	60	115	57				
MIN			8.3	1.5	1.5	11	15	14				
AC-FT			879	930	1,440	2,580	3,050	2,130				



76GJ 08000 Allendale Canal below headgate near Dummond, MT

LOCATION -- Lat.  $46^{\circ} 31' 54''$ , long  $113^{\circ} 13' 42''$ , in SE $\frac{1}{4}$  NE $\frac{1}{4}$  SE $\frac{1}{4}$  sec. 16, T. 9 N., R. 13 W., Granite County, on right bank 0.3 mi. (0.5 km) downstream from headgate which is at Flint Creek river mi. 12.7 (20.4 km), 10.2 mi. (16.4 km) southwest of Drummond.

DRAINAGE AREA -- Above headgate - 325 sq. mi. (842 sq. km).

GAGE -- Water stage recorder. Altitude of gage 4,400 ft. (1,341 m) from topography map.

AVERAGE DISCHARGE -- 1961 to 1976 - 20,350 AF/season (25.1 cu. hm/season).

EXTREMES -- Period of record: Maximum discharge, 151 ft.  $^3/s$  (4.28 m  $^3/s$ ), June 20, 1970. Minimum discharge, no flow at times.

REMARKS -- Record good except for periods of extreme moss growth.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENOALE CANAL BELOW HEAD GATE

NUMBER

76GJ08000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1961

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					0	53	63	72	44			
2					0	77	63	75	44			
3					0	77	63	75	44			
4					0	77	65	72	44			
5					0	80	82	67	44			
6					0	91	97	67	44			
7					0	97	94	65	44			
8					0	97	94	59	47			
9					22	100	94	57	53			
10					55	97	88	53	53			
11					55	94	88	50	55			
12					55	100	91	55	55			
13					55	110	94	63	55			
14					55	103	91	63	53			
15					57	91	91	63	53			
16					57	88	91	65	47			
17					59	88	94	65	43			
18					59	91	97	61	43			
19					55	77	57	55	44			
20					49	75	91	47	44			
21					53	70	80	44	44			
22					57	63	82	0	44			
23					63	53	88	0	44			
24					75	47	91	0	44			
25					72	47	91	0	44			
26					67	50	80	0	44			
27					53	53	80	46	44			
28					47	53	82	47	43			
29					46	55	85	47	43			
30					46	61	85	47	43			
31					44	-----	72	46	-----			
TOTAL					1,256	2,315	2,644	1,526	1,390			
MEAN					40.5	77.2	85.3	49.2	46.3			
MAX					75	110	97	75	55			
MIN					0	47	63	0	43			
AC-FT					2,490	4,590	5,240	3,030	2,760			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENOALE CANAL BELOW HEAD GATE

NUMBER

76GJ08000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1962

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1						87	83	93	44			
2						83	87	90	41			
3						80	90	93	49			
4						77	90	90	54			
5						77	96	93	54			
6						80	100	90	51			
7						83	96	87	51			
8						93	96	90	54			
9						96	93	90	54			
10						96	93	96	46			
11						93	90	56	41			
12						100	90	93	34			
13						96	96	93	30			
14						81	96	87	30			
15						90	93	80	30			
16						80	93	77	30			
17						83	90	80	30			
18						80	87	87	30			
19						77	87	80	30			
20						78	83	77	30			
21						56	80	71	30			
22						83	80	74	30			
23						90	77	74	30			
24						96	83	68	30			
25						93	90	57	30			
26						96	90	51	20			
27						90	90	51	0			
28						87	93	54	0			
29						80	96	57	0			
30						80	93	57	0			
31						93	93	49	-----			
TOTAL						2,561	2,794	2,425	983			
MEAN						85.4	90.1	78.2	32.8			
MAX						100	100	96	54			
MIN						56	77	45	0			
AC-FT						5,080	5,540	4,810	1,950			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

ALLENOALE CANAL BELOW HEAD GATE

NUMBER 76GJCR000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1963

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					20	87	34	55	59			
2					20	93	34	93	59			
3					20	93	34	90	62			
4					20	100	32	60	59			
5					20	103	32	87	57			
6					20	100	32	90	51			
7					20	93	32	87	44			
8					20	96	41	80	32			
9					20	103	49	68	32			
10					20	103	59	74	32			
11					20	107	68	80	32			
12					20	103	65	80	32			
13					24	103	65	90	32			
14					24	103	65	93	32			
15					28	103	65	90	30			
16					28	103	62	90	32			
17					32	96	62	90	32			
18					37	93	62	90	30			
19					37	87	65	90	30			
20					41	83	68	90	32			
21					46	100	68	90	30			
22					46	93	65	93	32			
23					51	90	68	90	32			
24					57	93	77	90	32			
25					57	90	80	90	30			
26					62	74	80	90	30			
27					68	59	80	80	30			
28					68	59	80	74	32			
29					74	49	90	71	32			
30					80	34	100	71	32			
31					87	-----	100	62	-----			
TOTAL					1,187	2,693	1,914	2,639	1,113			
MEAN					38.3	89.8	61.7	85.1	37.1			
MAX					87	107	100	96	62			
MIN					20	34	32	62	30			
AC-FT					2,350	5,340	3,800	5,230	2,210			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

ALLENOALE CANAL BELOW HEAD GATE

NUMBER 76GJ08000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1964

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					84	65	96	37				
2					84	46	93	24				
3					84	41	90	24				
4					84	62	93	24				
5					84	62	103	26				
6					90	60	103	26				
7					87	62	103	26				
8					71	65	100	26				
9					54	74	100	26				
10					46	74	93	24				
11					43	71	90	20				
12					41	71	93	20				
13					41	87	100	22				
14					41	90	96	20				
15					39	93	93	20				
16					41	90	90	22				
17					39	87	87	22				
18					41	87	87	22				
19					39	87	93	22				
20					39	84	103	22				
21					39	80	93	22				
22					39	77	87	22				
23					34	74	80	22				
24					30	74	77	22				
25					37	93	77	22				
26					57	93	77	22				
27					65	96	80	22				
28					62	96	77	22				
29					65	100	80	22				
30					65	100	65	22				
31					107	62	-----	-----				
TOTAL					1,665	2,448	2,761	695				
MEAN					55.5	79.0	89.1	23.2				
MAX					90	107	103	37				
MIN					30	41	62	20				
AC-FT					3,300	4,860	5,480	1,380				

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENDALE CANAL BELOW HEAD GATE

NUMBER 76GJC8000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1965

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					0	64	68	83	71			
2					0	68	65	80	71			
3					0	68	60	83	57			
4					0	71	60	90	44			
5					16	71	60	90	37			
6					16	74	65	93	24			
7					16	80	71	90	24			
8					16	93	77	84	24			
9					24	100	80	84	24			
10					24	107	68	80	24			
11					24	117	57	77	24			
12					24	114	57	77	24			
13					28	77	60	83	24			
14					28	90	60	74	24			
15					28	107	60	71	24			
16					28	114	60	68	24			
17					28	100	57	65	16			
18					28	57	57	62	0			
19					28	62	57	60	0			
20					32	117	57	62	0			
21					44	117	68	62	0			
22					60	114	77	68	0			
23					62	114	77	83	0			
24					62	114	77	77	0			
25					64	103	74	71	0			
26					64	83	74	71	0			
27					62	77	77	68	0			
28					62	71	74	68	0			
29					64	71	74	71	0			
30					57	68	74	74	0			
31					62	-----	87	74	-----			
TOTAL					1,051	2,683	2,089	2,343	560			
MEAN					33.9	89.4	67.4	75.6	18.7			
MAX					64	117	87	93	71			
MIN					0	57	57	60	0			
AC-FT					2,080	5,320	4,140	4,650	1,110			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENDALE CANAL BELOW HEAD GATE

NUMBER 76GJC8000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1966

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					68	100	93	68	57			
2					68	100	93	68	57			
3					74	107	96	62	57			
4					74	107	93	62	57			
5					80	103	93	62	57			
6					80	103	87	62	57			
7					80	103	87	59	57			
8					77	107	83	59	57			
9					74	103	83	59	57			
10					71	107	83	59	57			
11					68	110	87	59	57			
12					68	107	87	57	57			
13					68	103	87	57	57			
14					68	103	83	59	57			
15					65	103	83	59	59			
16					62	100	80	59	59			
17					49	100	77	57	51			
18					0	96	77	51	57			
19					0	96	77	49	57			
20					17	100	80	51	54			
21					46	100	83	57	54			
22					62	100	83	57	54			
23					74	96	87	57	54			
24					68	100	87	57	51			
25					57	100	87	54	51			
26					54	100	87	51	54			
27					62	96	83	49	54			
28					83	96	80	51	54			
29					96	96	65	51	54			
30					100	96	65	54	54			
31					103	-----	68	57	-----			
TOTAL					2,016	3,038	2,584	1,773	1,675			
MEAN					65.0	101	83.4	57.2	55.8			
MAX					103	110	96	68	59			
MIN					0	96	65	49	51			
AC-FT					4,000	6,030	5,130	3,520	3,320			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENOALE CANAL BELOW HEAD GATE

NUMBER 76GJC08000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1967

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					12	0	54	57	59			
2					16	47	54	97	59			
3					16	64	64	97	59			
4					16	61	71	100	59			
5					16	44	76	100	59			
6					20	44	79	100	61			
7					20	40	84	100	66			
8					20	40	86	100	71			
9					20	40	86	100	71			
10					23	40	86	100	71			
11					23	38	64	97	71			
12					23	38	89	97	74			
13					23	38	89	97	74			
14					27	38	89	92	74			
15					27	40	89	79	74			
16					27	40	89	81	74			
17					27	38	89	81	74			
18					38	38	92	81	74			
19					49	38	95	81	74			
20					51	38	95	81	74			
21					51	38	95	81	74			
22					51	36	95	79	74			
23					49	31	95	79	74			
24					47	31	95	81	71			
25					47	31	95	81	69			
26					44	29	95	71	49			
27					42	42	97	61	54			
28					42	56	97	61	59			
29					0	56	95	61	59			
30					0	56	95	61	59			
31					0	-----	95	61	-----			
TOTAL					867	1,210	2,669	2,635	2,014			
MEAN					28.0	40.3	66.1	85.0	67.1			
MAX					51	64	97	100	74			
MIN					0	0	54	61	49			
AC-FT					1,720	2,400	5,290	5,230	3,990			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENOALE CANAL BELOW HEAD GATE

NUMBER 76GJ08000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	97	89	92	61			
2					0	100	89	92	51			
3					0	95	92	95	42			
4					0	112	114	95	42			
5					0	103	114	95	40			
6					0	103	112	92	40			
7					0	106	109	92	40			
8					0	103	103	89	38			
9					27	100	103	89	40			
10					42	95	47	89	38			
11					56	103	100	89	38			
12					56	97	109	92	38			
13					59	100	109	89	38			
14					64	114	106	95	36			
15					64	112	106	100	36			
16					66	109	106	103	36			
17					71	106	109	92	36			
18					69	100	106	95	36			
19					69	97	106	87	36			
20					79	97	106	71	33			
21					80	97	106	69	29			
22					84	95	106	66	29			
23					80	95	103	66	29			
24					79	92	103	66	29			
25					79	92	103	64	21			
26					79	100	100	64	12			
27					80	100	100	64	12			
28					84	95	97	64	12			
29					89	95	97	64	12			
30					97	92	97	61	12			
31					97	-----	95	61	-----			
TOTAL					1,650	3,002	3,142	2,542	992			
MEAN					53.2	100	101	82.0	33.1			
MAX					97	114	114	103	61			
MIN					0	92	47	61	12			
AC-FT					3,270	5,950	6,230	5,040	1,970			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

ALLENOALE CANAL BELOW HEAD GATE

NUMBER 76GJ08000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					21	122	61	99	76			
2					21	118	59	99	76			
3					31	114	59	76	76			
4					31	114	59	67	76			
5					31	114	56	89	76			
6					37	114	56	89	76			
7					37	114	49	96	76			
8					37	114	37	103	79			
9					44	110	33	103	79			
10					54	106	31	103	67			
11					56	103	31	99	56			
12					56	103	31	99	64			
13					51	106	44	103	79			
14					51	114	73	99	82			
15					59	114	85	96	85			
16					64	110	85	92	85			
17					85	106	99	92	73			
18					106	106	110	89	61			
19					114	106	114	79	54			
20					130	103	110	73	51			
21					126	103	110	73	51			
22					126	99	118	73	56			
23					126	96	126	73	54			
24					126	118	122	73	51			
25					130	138	118	76	54			
26					130	134	122	76	54			
27					125	89	122	76	54			
28					118	70	118	76	54			
29					106	61	114	76	51			
30					103	61	106	76	39			
31					114	-----	103	76	-----			
TOTAL					2,446	3,180	2,561	2,669	1,965			
MEAN					78.9	106	82.6	86.1	65.5			
MAX					130	138	126	103	85			
MIN					21	61	31	67	39			
AC-FT					4,850	6,310	5,080	5,290	3,900			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

ALLENOALE CANAL BELOW HEAD GATE

NUMBER 76GJ08000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						92	79	73	56			
2						99	114	73	56			
3						114	110	73	56			
4						114	110	73	59			
5						118	106	73	59			
6						103	103	73	59			
7						118	99	76	59			
8						106	99	82	61			
9						103	99	82	61			
10						96	99	76	61			
11						92	110	76	61			
12						142	114	76	61			
13						147	118	76	64			
14						142	118	76	64			
15						142	114	76	64			
16						142	110	79				
17						142	110	73	64			
18						147	110	76	64			
19						147	106	76	64			
20						151	110	73	67			
21						147	110	70	64			
22						147	114	67	64			
23						142	114	64	61			
24						142	114	59	56			
25						134	114	54	49			
26						130	110	54	49			
27						134	110	54	46			
28						130	110	54	46			
29						76	103	54	46			
30						51	92	54	46			
31						-----	73	56	-----			
TOTAL						3,690	3,302	2,154	1,751			
MEAN						123	107	65.5	58.4			
MAX						151	119	82	67			
MIN						51	73	54	46			
AC-FT						7,320	6,550	4,270	3,470			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENOALE CANAL BELOW HEAD GATE

NUMBER 76GJ08000

## DISCHARGE, IN CUBIC FEET PER SECONDO, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1						114	122	102	96			
2						114	118	102	99			
3						118	118	102	110			
4						106	114	102	110			
5						106	110	96	92			
6						106	110	99	79			
7						102	106	102	79			
8						106	106	99	76			
9						114	106	99	70			
10						114	106	96	67			
11						114	99	96	67			
12						118	99	96	67			
13						134	99	96	64			
14						142	92	96	61			
15						142	92	92	61			
16						138	96	88	51			
17						134	96	88	41			
18						134	92	92	41			
19						134	92	92	41			
20						134	92	85	39			
21						134	96	85	39			
22						134	99	85	39			
23						134	102	85	39			
24						129	102	85	39			
25						129	102	85	39			
26						126	106	82	39			
27						122	102	82	39			
28						122	106	82	39			
29		-----				122	106	82	39			
30		-----				122	106	88	39			
31		-----				106	96	-----	-----			
TOTAL						3,698	3,198	2,857	1,801			
MEAN						123	103	92.2	60.0			
MAX						142	122	102	110			
MIN						102	92	82	39			
AC-FT						7,330	6,340	5,670	3,570			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENOALE CANAL BELOW HEAD GATE

NUMBER 76GJ08000

## DISCHARGE, IN CUBIC FEET PER SECONDO, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					0	41	129	95	105	41		
2					0	31	129	95	109	41		
3					0	27	129	98	109	41		
4					0	39	129	95	109	41		
5					0	58	125	95	109	41		
6					23	66	125	91	105	31		
7					18	58	125	88	95	21		
8					0	53	121	88	88	21		
9					0	48	117	91	88	21		
10					0	78	113	91	84	21		
11					0	105	113	91	84	21		
12					0	95	109	91	91	21		
13					0	95	105	91	88	21		
14					0	125	105	95	84	21		
15					12	137	109	95	84	19		
16					19	142	109	95	84	11		
17					20	142	105	98	81	0		
18					0	137	109	102	81	0		
19					0	133	117	98	84	0		
20					25	125	113	102	84	0		
21					33	125	113	102	78	0		
22					37	125	109	105	66	0		
23					43	125	102	117	66	0		
24					41	129	91	113	66	0		
25					39	125	95	109	55	0		
26					45	121	91	105	41	0		
27					55	121	91	102	41	0		
28					58	125	91	102	41	0		
29					72	133	91	102	41	0		
30		-----			75	133	91	105	41	0		
31		-----			53	-----	91	105	-----	0		
TOTAL					650.0	2,997	3,392	3,052	2,382	434		
MEAN					21.0	99.9	109	98.5	79.4	14.0		
MAX					75	142	129	117	109	41		
MIN					0	27	91	88	41	0		
AC-FT					1,290	5,940	6,730	6,050	4,720	861		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENDALE CANAL BELOW HEAD GATE

NUMBER 76GJ08000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					18	52	98		0			
2					40	57	98		0			
3					40	63	94		0			
4					40	63	91		0			
5					40	60	91		0			
6					42	66	87		0			
7					50	66	84		0			
8					60	72	75		0			
9					52	84	63		0			
10					17	91	60		0			
11					0	91	57		0			
12					0	87	47		0			
13					0	87	42		0			
14					0	101	40		0			
15					15	125	32		0			
16					38	125	843		0			
17					50	139	0		540			
18					57	134	0		30			
19					81	130	0		30			
20					91	130	0		30			
21					87	125	0		30			
22					87	125	0		30			
23					84	125	0		30			
24					81	121	0		30			
25					91	117	0		30			
26					91	113	0		30			
27					78	91	0		30			
28					63	84	0		30			
29					57	94	0		30			
30					21	98	0		30			
31					10	-----	0		-----			
TOTAL					1,490	2,916	1,067.3		0	395.0		
MEAN					48.1	97.2	34.4		0	13.2		
MAX					91	139	98		0	30		
MIN					0	52	0		0	0		
AC-FT					2,960	5,780	2,120		0	783		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENDALE CANAL BELOW HEAD GATE

NUMBER 76GJC08000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	42	72	105	101	97		
2					0	63	81	101	101	94		
3					0	63	84	101	101	94		
4					0	63	87	101	101	94		
5					0	63	87	97	101	91		
6					0	63	84	97	101	91		
7					0	63	84	101	105	87		
8					0	57	81	101	105	87		
9					0	57	81	101	105	84		
10					0	57	84	105	105	84		
11					0	55	91	113	105	84		
12					0	55	97	109	105	84		
13					0	55	97	105	109	84		
14					0	57	87	101	113	84		
15					0	60	69	105	113	84		
16					0	57	63	109	109	78		
17					0	55	129	109	105	78		
18					0	55	109	105	101	78		
19					0	55	125	109	101	78		
20					0	55	117	109	113	78		
21					0	55	121	109	109	78		
22					0	57	125	109	109	75		
23					0	57	121	109	109	75		
24					0	57	117	109	109	75		
25					19	57	113	109	109	72		
26					34	60	113	105	105	72		
27					32	63	113	109	105	72		
28					32	66	113	105	101	72		
29					30	66	109	101	101	72		
30					30	63	105	101	97	45		
31					63	-----	105	97	-----	-----		
TOTAL					177	1,814	2,959	3,255	3,251	2,421		
MEAN					5.90	58.5	98.6	105	105	80.7		
MAX					34	66	129	113	113	97		
MIN					0	42	63	67	97	45		
AC-FT					351	3,600	5,870	6,460	6,450	4,800		

76GJ 08080 Allendale Canal above tail end near Drummond, MT

LOCATION -- Lat.  $46^{\circ} 36' 56''$ , long  $113^{\circ} 13' 39''$ , in SE $\frac{1}{4}$  SE $\frac{1}{4}$  SE $\frac{1}{4}$   
sec. 16, T. 10 N., R. 13 W., Granite County on left bank 13.2  
mi. (21.2 km) downstream from headgate which is at Flint Creek  
river mile 12.7 (20.4 km), 5.4 mi. (8.7 km) southwest of Drummond.

DRAINAGE AREA -- Above headgate 325 sq. mi. (842 sq. km.).

GAGE -- Water stage recorder. Altitude of gage 4,340 ft.  
(1,323 m) from topography map.

AVERAGE DISCHARGE -- 1961 to 1976 - 9,600 AF/season  
(11.8 cu. hm/season).

EXTREMES -- Period of record: Maximum discharge, 111 ft.  $^3/s$   
(3.14 m  $^3/s$ ), June 16 and 16, 1968. Minimum discharge, no  
flow at times.

REMARKS -- Records good except for periods of extreme moss growth.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## ALLENOALE CANAL BELOW HEAD GATE

NUMBER 76GJC8000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	52	51	109	40	42		
2					0	52	98	105	17	16		
3					0	55	94	105	0	0		
4					0	47	94	98	0	0		
5					0	45	91	94	0	0		
6					0	40	87	94	0	0		
7					0	36	87	94	6+3	0		
8					0	45	84	94	30	0		
9					0	40	98	91	30	0		
10					0	40	105	94	30	0		
11					0	81	109	94	30	0		
12					0	101	121	91	30	0		
13					0	117	130	87	30	0		
14					0	117	130	87	30	0		
15					0	117	125	91	30	0		
16					0	113	81	101	32	0		
17					0	117	55	109	36	0		
18					0	84	55	109	40	0		
19					0	3.0	55	109	50	0		
20					0	1.0	52	109	50	0		
21					0	34	52	109	50	0		
22					0	47	52	109	50	0		
23					0	47	60	105	47	0		
24					0	47	101	51	47	0		
25					13	47	101	78	45	0		
26						52	47	98	60	47		
27						52	66	94	60	47		
28						50	78	94	60	45		
29						50	81	94	55	42		
30						52	81	101	42	42		
31						52	-----	109	40	-----		
TOTAL					0	321	1,878.0	2,798	2,774	973.3	58	
MEAN					0	10.4	62.6	90.3	89.5	32.4	1.87	
MAX					0	52	117	130	109	50	42	
MIN					0	0	1.0	52	40	0	0	
AC-FT					0	637	3,730	5,550	5,500	1,930	115	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## ALLENOALE CANAL BELOW HEAD GATE

NUMBER 76GJ08000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	81	121	84	57			
2					0	94	117	84	57			
3					22	130	113	84	57			
4					50	125	117	84	57			
5					32	130	121	84	57			
6					24	134	121	84	60			
7					24	139	125	84	60			
8					24	148	117	87	60			
9					22	148	117	84	60			
10					22	143	113	84	60			
11					8.4	148	113	84	55			
12					0	139	117	81	52			
13					0	134	117	81	47			
14					0	125	117	81	47			
15					13	130	117	81	47			
16					20	130	117	81	47			
17					20	134	121	81	47			
18					20	125	121	81	47			
19					18	121	130	81	50			
20					18	125	117	81	50			
21					16	134	113	78	47			
22					16	130	113	66	47			
23					32	121	109	66	47			
24					52	109	105	66	47			
25					52	101	109	66	47			
26					3.8	98	109	69	47			
27					45	94	105	66	47			
28					55	94	101	60	47			
29					50	105	91	60	47			
30					55	121	69	60	47			
31					75	-----	91	57	-----			
TOTAL					0	823.4	3,690	3,484	2,370	1,544		
MEAN					0	26.6	123	112	76.5	51.5		
MAX					0	75	148	130	87	60		
MIN					0	0	81	69	57	47		
AC-FT					0	1,630	7,320	6,910	4,700	3,060		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENOALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1963

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					38	38	0	38	28			
2					38	26	11	40	31			
3					38	0	18	43	33			
4					40	55	18	46	33			
5					40	59	24	46	35			
6					40	55	24	46	33			
7					40	55	20	43	33			
8					43	67	22	43	20			
9					43	72	33	40	16			
10					43	59	35	49	14			
11					43	72	46	49	12			
12					43	72	38	49	7.5			
13					46	59	35	52	3.5			
14					48	55	35	52	5.5			
15					46	55	38	52	5.5			
16					48	55	38	52	5.5			
17					43	52	35	49	7.5			
18					40	49	33	49	18			
19					40	49	33	49	0			
20					59	55	35	55	0			
21					72	72	33	55	0			
22					59	55	35	55	0			
23					55	52	38	52	5.5			
24					55	55	46	55	0			
25					63	52	46	55	0			
26					67	49	43	55	0			
27					63	35	43	55	0			
28					55	38	40	49	0			
29					46	38	38	43	0			
30					40	8.4	35	40	0			
31					38	-----	35	33	-----			
TOTAL					1,472	1,513.4	1,003	1,489	346.5			
MEAN					47.5	50.4	32.4	48.0	11.6			
MAX					72	72	46	55	35			
MIN					38	0	0	33	0			
AC-FT					2,920	3,000	1,990	2,950	687			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENOALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1964

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						23	35	46	31			
2						80	26	46	14			
3						76	14	43	14			
4						71	40	43	14			
5						76	38	46	14			
6						80	33	52	14			
7						76	35	63	14			
8						76	35	59	14			
9						80	40	59	14			
10						76	43	59	12			
11						59	46	55	12			
12						55	43	59	12			
13						59	52	63	12			
14						49	59	59	12			
15						67	67	55	12			
16						55	59	55	9.5			
17						43	52	59	9.5			
18						38	52	67	9.5			
19						33	52	76	9.5			
20						29	46	63	9.5			
21						26	40	49	9.5			
22						29	40	46	9.5			
23						38	33	46	9.5			
24						43	31	46	9.5			
25						40	35	46	5.0			
26						52	35	43	5.0			
27						52	35	46	5.0			
28						49	35	52	5.0			
29						46	35	63	5.0			
30						38	43	55	5.0			
31						46	52	-----	-----			
TOTAL						1,614	1,275	1,671	330.5			
MEAN						53.8	41.1	53.9	11.0			
MAX						80	67	76	31			
MIN						23	14	43	5.0			
AC-FT						3,200	2,530	3,310	656			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

ALLENDALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1961

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	42	35	37	15			
2					0	42	33	35	15			
3					0	55	33	37	15			
4					0	44	33	37	15			
5					0	44	47	35	15			
6					0	44	55	33	15			
7					0	44	49	33	14			
8					2.0	47	44	27	16			
9					0	42	37	31	22			
10					9.0	47	33	27	21			
11					15	42	29	29	21			
12					18	39	29	31	10			
13					35	49	31	33	15			
14					47	52	29	33	26			
15					47	49	31	31	22			
16					47	49	31	31	19			
17					49	44	29	27	8.0			
18					44	47	33	27	8.0			
19					37	42	35	24	13			
20					21	44	35	14	13			
21					7.0	39	33	8.0	13			
22					11	35	33	7.0	15			
23					11	31	37	4.0	15			
24					42	21	37	5.0	15			
25					42	19	39	4.0	16			
26					42	24	39	6.0	16			
27					42	26	39	13	18			
28					42	26	42	14	18			
29					42	24	42	15	18			
30					42	29	44	14	16			
31					42	-----	39	15	-----			
TOTAL					736.0	1,182	1,135	717.0	478.0			
MEAN					23.7	39.4	36.6	23.1	15.9			
MAX					49	55	55	37	26			
MIN					0	19	29	4.0	8.0			
AC-FT					1,460	2,340	2,250	1,420	948			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

ALLENDALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1962

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						64	52	68	26			
2						52	52	68	24			
3						56	49	68	26			
4						49	49	68	32			
5						49	52	68	30			
6						46	52	56	24			
7						43	52	52	26			
8						49	49	49	30			
9						46	56	49	36			
10						46	60	49	40			
11						46	64	56	34			
12						43	64	60	30			
13						56	68	73	0			
14						60	64	73	0			
15						73	56	64	0			
16						49	56	60	0			
17						46	49	68	0			
18						46	46	73	0			
19						49	40	64	0			
20						56	38	60	0			
21						34	34	60	0			
22						49	36	56	0			
23						64	40	60	0			
24						68	46	56	0			
25						68	56	43	0			
26						64	64	36	0			
27						60	68	38	0			
28						56	56	43	0			
29						52	60	43	0			
30						52	64	38	0			
31						73	34	-----	-----			
TOTAL						1,591	1,665	1,753	358			
MEAN						53.0	53.7	56.5	11.9			
MAX						73	73	73	40			
MIN						34	34	34	0			
AC-FT						3,160	3,300	3,480	710			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

ALLENOALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1967

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						67	38	52	40			
2						67	33	55	40			
3						71	31	63	43			
4						67	24	67	43			
5						67	31	71	40			
6						67	31	67	43			
7						80	35	67	49			
8						75	46	71	59			
9						75	49	67	52			
10						94	52	63	52			
11						99	40	63	55			
12						94	49	59	52			
13						75	59	55	43			
14						63	63	49	38			
15						67	63	40	35			
16						63	63	43	28			
17						67	63	40	26			
18						63	59	40	26			
19						55	59	46	24			
20						46	55	49	22			
21						35	52	49	20			
22						28	52	46	20			
23						26	52	46	20			
24						18	52	49	20			
25						22	49	46	20			
26						33	49	46	9.5			
27						20	49	40	0			
28						33	49	40	7.5			
29						40	49	40	9.5			
30						40	49	40	12			
31						52	38					
TOTAL						1,717	1,497	1,607	948.5			
MEAN						57.2	48.3	51.8	31.6			
MAX						99	63	71	59			
MIN						18	24	38	0			
AC-FT						3,410	2,970	3,190	1,880			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

ALLENOALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	55	49	49	28			
2					0	59	46	52	22			
3					0	52	49	52	9.5			
4					0	67	52	49	9.5			
5					0	80	52	52	9.5			
6					0	84	52	55	12			
7					0	89	52	55	12			
8					0	84	59	52	9.5			
9					0	84	49	52	9.5			
10					0	84	28	52	5.5			
11					0	84	52	67	0			
12					0	80	84	59	0			
13					0	84	80	63	0			
14					0	105	80	80	0			
15					0	111	80	84	14			
16					5.7	111	75	75	14			
17					24	99	89	75	12			
18					24	89	84	70	12			
19					24	84	75	67	12			
20					38	75	67	52	14			
21					52	70	63	40	5.5			
22					63	67	63	33	0			
23					63	75	59	28	7.5			
24					63	70	52	26	9.5			
25					59	70	49	26	5.5			
26					59	63	49	24	0			
27					55	63	46	24	0			
28					52	55	52	24	0			
29					46	55	59	26	0			
30					52	52	52	26	0			
31					55	52	28					
TOTAL					734.7	2,300	1,850	1,517	233.0			
MEAN					23.7	76.7	59.7	48.9	7.77			
MAX					63	111	89	84	28			
MIN					0	52	28	24	0			
AC-FT					1,460	4,560	3,670	3,010	462			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

ALLENDALE CANAL ABOVE TAIL END

NUMBER 76GJC8080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1965

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						59	35	52	35			
2						55	38	49	28			
3						49	40	49	24			
4						49	42	55	22			
5						49	46	67	20			
6						35	40	72	58			
7						38	46	72	0			
8						40	52	67	0			
9						52	52	63	0			
10						46	55	52	0			
11						52	42	46	0			
12						63	40	55	0			
13						55	35	63	0			
14						59	33	49	18			
15						67	28	43	58			
16						81	35	40	0			
17						76	33	40	0			
18						55	35	38	0			
19						46	33	38	0			
20						85	35	35	0			
21						90	49	43	0			
22						94	46	55	0			
23						94	46	63	0			
24						94	46	49	0			
25						85	43	40	0			
26						76	40	40	0			
27						63	43	38	0			
28						46	40	40	0			
29		-----				42	38	43	0			
30		-----				40	43	46	0			
31		-----				49	43	43	-----			
TOTAL						1,835	1,278	1,545	142.4			
MEAN						61.2	41.2	49.8	4.75			
MAX						94	55	72	35			
MIN						35	28	35	0			
AC-FT						3,640	2,530	3,060	282			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

ALLENDALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1966

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						46	49	38	38			
2						49	52	35	38			
3						52	49	35	38			
4						49	49	35	35			
5						46	52	35	35			
6						43	55	38	32			
7						43	55	40	35			
8						46	49	40	32			
9						46	46	40	31			
10						49	46	38	31			
11						52	49	38	31			
12						55	49	40	31			
13						59	55	40	31			
14						59	59	40	32			
15						59	63	40	32			
16						67	59	38	32			
17						67	55	38	32			
18						67	52	35	32			
19						63	52	32	32			
20						72	55	32	32			
21						72	55	35	31			
22						72	55	35	28			
23						67	55	32	31			
24						72	52	32	32			
25						72	52	32	35			
26						63	49	31	35			
27						52	49	28	38			
28						49	49	32	40			
29		-----				46	43	32	40			
30		-----				46	43	35	43			
31		-----				40	35	35	-----			
TOTAL						1,700	1,592	1,106	1,015			
MEAN						56.7	51.4	35.7	33.8			
MAX						72	63	40	43			
MIN						43	40	28	28			
AC-FT						3,370	3,160	2,190	2,010			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

ALLENOALE CANAL ABOVE TAIL END

NUMBER 76GJC8080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						50	47	28	38	9.0		
2						50	45	28	40	9.0		
3						50	45	30	43	9.0		
4						47	45	30	47	6.2		
5						40	47	34	50	7.5		
6						38	47	32	54	7.5		
7						36	43	34	40	10		
8						32	40	30	34	10		
9						32	40	32	40	9.0		
10						28	40	32	28	3.8		
11						36	40	30	22	0		
12						40	40	28	22	0		
13						43	36	28	22	0		
14						45	36	28	20	0		
15						45	38	28	20	0		
16						45	38	30	16	0		
17						40	38	32	9.0	0		
18						36	36	30	9.0	0		
19						38	38	30	9.0	0		
20						38	36	26	10	0		
21						36	39	26	10	0		
22						36	32	30	10	0		
23						36	32	32	7.5	0		
24						38	32	34	6.2	0		
25						40	30	30	6.2	0		
26						43	28	30	6.2	0		
27						45	26	30	6.2	0		
28						50	26	26	6.2	0		
29						47	28	28	0	0		
30						47	30	34	7.5	0		
31						-----	28	36	-----	0	-----	
TOTAL						1,227	1,146	936	639.0	81.0		
MEAN						40.9	37.0	30.2	21.3	2.61		
MAX						50	47	36	54	10		
MIN						28	26	26	0	0		
AC-FT						2,430	2,270	1,860	1,270	161		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

ALLENOALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	47	41	36	30			
2					0	47	36	41	30			
3					0	41	36	45	30			
4					0	47	38	45	30			
5					0	43	47	43	32			
6					0	38	45	47	32			
7					0	38	45	45	28			
8					0	32	45	41	22			
9					0	26	45	38	20			
10					0	38	43	38	20			
11					0	45	43	36	17			
12					2.8	38	41	32	20			
13					15	30	41	34	18			
14					17	30	43	41	18			
15					18	34	45	43	20			
16					34	36	47	43	22			
17					38	41	47	41	22			
18					38	45	47	43	22			
19					38	52	52	43	24			
20					36	52	55	45	28			
21					38	52	57	45	28			
22					43	45	60	45	20			
23					50	47	52	47	22			
24					43	50	38	41	26			
25					38	50	38	41	22			
26					34	50	36	41	9.0			
27					32	47	36	41	9.0			
28					36	41	36	38	11			
29					34	47	36	36	12			
30					57	43	28	36	12			
31					55	-----	30	30	-----			
TOTAL					696.8	1,272	1,329	1,261	656.0			
MEAN					22.5	42.4	42.9	40.7	21.9			
MAX					57	52	60	47	32			
MIN					0	26	28	30	9.0			
AC-FT					1,380	2,520	2,640	2,500	1,300			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENDALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						57	5.0	33	42			
2						57	5.0	33	42			
3						52	5.0	29	42			
4						47	5.0	21	37			
5						37	5.0	29	39			
6						35	5.0	33	44			
7						37	5.0	42	47			
8						37	5.0	49	44			
9						44	5.0	47	37			
10						47	5.0	47	29			
11						44	11	52	19			
12						52	12	49	25			
13						44	19	52	33			
14						47	31	52	35			
15						49	35	57	31			
16						47	42	57	27			
17						47	44	57	29			
18						47	42	57	25			
19						49	42	49	23			
20						54	44	37	23			
21						52	42	37	23			
22						42	39	39	21			
23						39	39	42	16			
24						49	37	42	16			
25						46	37	44	14			
26						44	35	47	16			
27						35	33	47	17			
28						27	35	47	18			
29						11	35	44	18			
30						5.0	35	47	5.0			
31						-----	33	44	-----			
TOTAL						1,280.0	772.0	1,362	837.0			
MEAN						42.7	24.9	43.9	27.9			
MAX						57	44	57	47			
MIN						5.0	5.0	21	5.0			
AC-FT						2,540	1,530	2,700	1,660			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENDALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						47	33	21	37			
2						44	47	21	33			
3						44	29	27	33			
4						49	25	29	35			
5						49	23	35	42			
6						49	21	39	44			
7						49	25	35	44			
8						52	27	37	47			
9						54	27	35	44			
10						52	31	29	42			
11						44	35	25	37			
12						52	39	27	42			
13						57	42	29	44			
14						54	47	23	47			
15						54	42	29	41			
16						54	29	31	42			
17						62	17	31	35			
18						59	23	27	27			
19						54	37	27	27			
20						52	44	29	19			
21						54	47	33	16			
22						54	65	33	16			
23						59	68	33	16			
24						54	68	33	16			
25						52	57	31	14			
26						49	52	33	12			
27						52	54	33	0			
28						54	47	31	0			
29						49	31	27	0			
30						33	23	29	0			
31						-----	17	33	-----			
TOTAL						1,541	1,172	935	855			
MEAN						51.4	37.8	30.2	28.5			
MAX						62	68	39	47			
MIN						33	17	21	0			
AC-FT						3,060	2,320	1,850	1,700			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

ALLENOALE CANAL ABOVE TAIL END

NUMBER 76GJC08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	28	43	34	22	11		
2					0	28	45	32	17	6.4		
3					0	20	45	30	5.0	1.5		
4					0	26	45	30	6.5	3.5		
5					0	38	38	34	8.0	5.0		
6					0	50	34	32	8.0	6.5		
7					0	45	30	34	9.5	8.0		
8					0	41	32	41	20	6.5		
9					0	30	32	43	26	3.5		
10					0	28	34	43	24	0		
11					0	30	30	45	20	0		
12					0	43	38	41	19	0		
13					0	47	47	41	17	.89		
14					0	41	38	38	17	.50		
15					0	43	36	34	17	0		
16					0	41	26	38	13	0		
17					0	45	14	45	14	0		
18					0	47	14	50	13	0		
19					.09	52	16	47	22	0		
20					1.3	43	17	52	17	0		
21					.50	43	14	55	14	0		
22					0	36	16	45	14	0		
23					0	41	13	32	14	0		
24					0	45	22	28	14	0		
25					.84	45	22	22	14	0		
26					11	41	30	20	13	0		
27					13	41	32	22	14	0		
28					.5	45	30	24	14	0		
29			-----		13	50	34	20	11	0		
30			-----		14	43	38	17	11	0		
31			-----		20	-----	36	26	-----	0	-----	
TOTAL					0	83.23	1,196	941	1,095	448.0	53.29	
MEAN					0	2.68	39.9	30.4	35.3	14.9	1.72	
MAX					0	20	52	47	55	26	11	
MIN					0	0	20	13	17	5.0	0	
AC-FT					0	165	2,370	1,870	2,170	889	106	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

ALLENOALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	48	41	30	36			
2					0	45	36	32	34			
3					0	43	36	36	32			
4					0	45	36	38	30			
5					0	45	36	36	32			
6					0	55	38	38	30			
7					0	57	43	36	30			
8					0	52	43	38	32			
9					0	52	45	36	32			
10					0	52	45	36	28			
11					0	55	47	36	20			
12					4.6	47	45	34	17			
13					11	20	36	34	16			
14					13	50	41	36	17			
15					16	50	38	36	20			
16					16	52	38	38	19			
17					19	55	36	41	13			
18					17	55	36	41	8.0			
19					30	55	38	41	8.0			
20					41	55	38	43	6.5			
21					41	57	34	43	6.5			
22					43	50	36	41	8.0			
23					50	47	38	38	8.0			
24					55	41	38	41	9.5			
25					57	38	38	38	9.5			
26					47	32	41	41	8.0			
27					45	32	41	41	8.0			
28					45	30	38	36	8.0			
29					43	36	38	34	9.5			
30					45	41	30	34	9.5			
31					47	-----	34	34	-----			
TOTAL					0	685.6	1,392	1,198	1,157	545.0		
MEAN					0	22.1	46.4	38.6	37.3	18.2		
MAX					0	57	57	47	43	36		
MIN					0	0	20	30	30	6.5		
AC-FT					0	1,360	2,760	2,380	2,290	1,080		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENDALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	26	30		0			
2					0	30	30		0			
3					0	32	28		0			
4					0	30	26		0			
5					0	24	22		0			
6					0	22	20		0			
7					0	22	20		0			
8					0	24	20		0			
9					10	34	14		0			
10					5.0	43	14		0			
11					0	32	14		0			
12					0	30	13		0			
13					0	28	17		0			
14					0	34	16		0			
15					0	38	13		0			
16					14	34	1.6		0			
17					30	32	.31		0			
18					32	32	.50		3.7			
19					41	32	0		8.0			
20					45	32	0		6.5			
21					41	32	0		6.5			
22					38	32	0		5.0			
23					36	32	0		5.0			
24					36	34	0		5.0			
25					43	36	0		5.0			
26					45	36	0		5.0			
27					43	30	0		6.5			
28					28	28	0		5.0			
29					26	28	0		2.0			
30					20	30	0		1.3			
31					2.0	-----	0		-----			
TOTAL					535.0	929	299.41	0	64.5			
MEAN					17.3	31.0	9.66	0	2.15			
MAX					45	43	30	0	8.0			
MIN					0	22	0	0	0			
AC-FT					1,060	1,840	594	0	128			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## ALLENDALE CANAL ABOVE TAIL END

NUMBER 76GJ08080

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	15	43	41	36	38		
2					0	34	45	38	36	38		
3					0	9.5	45	41	38	36		
4					0	36	47	36	41	34		
5					0	43	45	34	43	30		
6					0	45	43	41	45	31		
7					0	49	41	41	45	38		
8					0	49	38	41	43	36		
9					0	47	36	41	45	36		
10					0	43	45	38	47	36		
11					0	43	45	45	45	36		
12					0	43	47	47	43	36		
13					0	36	55	49	41	36		
14					0	41	57	47	45	34		
15					0	41	49	47	45	36		
16					0	34	47	47	45	31		
17					0	30	52	43	45	38		
18					.50	34	47	38	47	29		
19					.52	27	47	41	43	20		
20					0	34	47	43	43	20		
21					0	31	55	45	45	15		
22					0	25	55	45	47	15		
23					0	25	45	45	45	14		
24					0	23	43	45	43	14		
25					0	23	43	43	41	13		
26					0	31	41	43	38	13		
27					0	54	38	45	36	13		
28					0	52	38	47	34	13		
29					.50	47	38	38	34	14		
30					2.0	45	41	36	31	7.7		
31					45	-----	36	36	-----	-----		
TOTAL					3,52	1,134.5	1,358	1,307	1,291	800.7		
MEAN					.12	36.6	45.3	42.2	41.6	26.7		
MAX					2.0	54	57	46	47	38		
MIN					0	9.5	36	34	31	7.7		
AC-FT					7.0	2,250	2,690	2,590	2,560	1,590		

76H 06000 Hedge Canal below headgate near Hamilton, MT

LOCATION -- Lat.  $46^{\circ} 07' 51''$ , long  $114^{\circ} 09' 41''$ , in NE $\frac{1}{4}$  NE $\frac{1}{4}$  SE $\frac{1}{4}$  sec. 2, T. 4 N., R 21 W., Ravalli County, on left bank 1.1 mi. (1.8 km) downstream from headgate which is at Bitterroot River mile 71.2 (114.6 km), 8 mi. (12.0 km) south of Hamilton.

DRAINAGE AREA -- Above headgate - 1,203 sq. mi. (3,116 sq. km).

GAGE -- Water stage recorder. Altitude of gage 3,730 ft. (1,137 m) from topography map.

AVERAGE DISCHARGE -- 1968 to 1976 - 26,790 AF/season (33.0 cu. hm/season).

EXTREMES -- Period of record: Maximum discharge, 204 ft.  $^3/s$  (5.78 m  $^3/s$ ), May 1, 1968. Minimum discharge, no flow at times.

REMARKS -- Records good except for periods of extreme moss growth.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## HEDGE CANAL BELOW HEAD GATE

NUMBER 76H 06000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					204	100	97	111	87			
2					100	106	129	111	87			
3					93	106	40	111	87			
4					93	106	0	111	84			
5					81	106	0	111	84			
6					81	106	0	120	84			
7					72	120	22	120	84			
8					68	106	81	129	84			
9					70	111	106	129	84			
10					74	111	106	129	84			
11					154	111	120	129	84			
12					161	120	129	129	84			
13					120	120	106	129	84			
14					151	120	142	129	84			
15					174	120	142	100	84			
16					81	120	142	90	84			
17					68	129	129	90	84			
18					93	137	129	90	84			
19					129	137	120	93	84			
20					129	137	120	90	84			
21					161	129	120	93	84			
22					174	120	120	87	84			
23					111	111	120	87	84			
24					111	106	120	87	84			
25					111	100	120	87	81			
26					106	100	120	87	81			
27					106	100	111	87	81			
28					106	100	111	87	81			
29					106	100	106	87	81			
30		-----			100	97	111	87	81			
31		-----			87	-----	111	87	-----			
TOTAL					3,475	3,392	3,130	3,214	2,511			
MEAN					112	113	101	104	83.7			
MAX					204	137	142	129	87			
MIN					68	97	0	87	81			
AC-FT					6,890	6,730	6,210	6,370	4,980			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## HEDGE CANAL BELOW HEAD GATE

NUMBER 76H 06000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					76	65	64	120	111			
2					76	0	64	120	111			
3					76	0	64	120	111			
4					76	44	64	120	106			
5					78	87	64	120	106			
6					78	87	64	120	106			
7					78	87	64	120	106			
8					78	87	64	120	106			
9					78	87	64	120	106			
10					78	90	72	120	106			
11					78	87	87	120	106			
12					76	87	93	111	106			
13					76	66	93	111	106			
14					78	13	90	111	106			
15					76	0	13	111	106			
16					76	42	93	111	106			
17					76	78	100	111	106			
18					76	78	111	111	106			
19					76	81	129	111	106			
20					76	81	136	106	87			
21					72	78	142	100	66			
22					70	78	142	100	66			
23					70	78	136	100	66			
24					70	76	136	100	66			
25					68	76	136	106	68			
26					68	76	136	106	68			
27					78	74	136	111	68			
28					93	66	129	106	66			
29		-----			87	66	120	111	66			
30		-----			87	62	120	111	43			
31		-----			87	-----	120	111	-----			
TOTAL					2,386	1,977	3,046	3,476	2,759			
MEAN					77.0	65.9	98.3	112	92.0			
MAX					93	90	142	120	111			
MIN					68	0	13	100	43			
AC-FT					4,730	3,920	6,040	6,890	5,470			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## HEDGE CANAL BELOW HEAD GATE

NUMBER 76H 06000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					102	76	76	98	94			
2					102	76	76	98	94			
3					102	79	73	98	94			
4					102	81	76	98	94			
5					102	81	76	98	98			
6					102	79	73	98	98			
7					90	79	79	94	98			
8					76	79	87	91	79			
9					76	76	102	91	69			
10					81	76	106	91	67			
11					87	76	106	91	67			
12					87	76	106	91	67			
13					87	76	91	91	67			
14					87	76	87	91	67			
15					87	76	87	91	67			
16					87	76	94	91	67			
17					87	76	94	91	67			
18					81	76	94	91	67			
19					81	76	91	87	67			
20					84	76	91	87	67			
21					84	76	87	87	67			
22					84	76	87	87	67			
23					84	76	87	87	67			
24					84	76	87	87	67			
25					81	76	87	91	67			
26					81	76	91	98	46			
27					81	76	94	94	37			
28					79	76	102	94	36			
29					79	76	98	94	36			
30					76	79	94	94	36			
31					76	-----	94	94	-----			
TOTAL					2,679	2,305	2,773	2,864	2,081			
MEAN					86.4	76.8	89.5	92.4	69.4			
MAX					102	81	106	98	98			
MIN					76	76	73	87	36			
AC-FT					5,310	4,570	5,500	5,680	4,130			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## HEDGE CANAL BELOW HEAD GATE

NUMBER 76H 06000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					54	76	81	119	84			
2					56	76	81	119	78			
3					58	76	81	114	74			
4					56	78	81	114	72			
5					56	84	78	114	72			
6					54	81	76	114	72			
7					53	84	76	114	65			
8					53	84	81	110	61			
9					54	87	84	110	61			
10					54	87	87	110	61			
11					54	87	87	110	61			
12					53	87	87	106	61			
13					56	87	87	106	61			
14					60	87	94	106	61			
15					67	84	114	106	61			
16					76	84	124	106	61			
17					78	84	129	106	61			
18					78	84	129	106	61			
19					76	84	124	106	61			
20					76	84	124	102	54			
21					76	84	124	102	50			
22					76	84	119	102	50			
23					76	87	119	98	50			
24					76	87	119	102	50			
25					76	87	119	98	50			
26					78	87	119	98	49			
27					78	84	119	98	49			
28					81	84	119	98	49			
29					81	84	119	98	49			
30					78	81	119	87	49			
31					78	-----	119	81	-----			
TOTAL					2,076	2,514	3,219	3,260	1,798			
MEAN					67.0	83.8	104	105	59.9			
MAX					81	87	129	119	84			
MIN					53	76	76	81	49			
AC-FT					4,120	4,990	6,380	6,470	3,570			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## HEOGE CANAL BELOW HEAD GATE

NUMBER 76H 06000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					6.3	78	65	100	78	14		
2					62	78	62	100	78	14		
3					62	78	62	100	78	6.6		
4					62	75	62	100	78	0		
5					62	72	62	95	78	0		
6					62	70	70	91	75	0		
7					62	70	81	95	75	0		
8					60	70	81	95	75	0		
9					60	70	81	95	72	0		
10					62	70	81	95	72	0		
11					60	70	78	95	67	0		
12					75	70	84	91	70	0		
13					84	70	91	95	62	0		
14					78	67	91	95	58	0		
15					72	67	91	95	54	0		
16					72	67	91	95	50	0		
17					72	67	87	95	50	0		
18					72	67	87	95	48	0		
19					72	67	87	91	46	0		
20					72	65	87	91	45	0		
21					72	65	84	91	43	0		
22					72	65	81	91	43	0		
23					72	65	81	87	43	0		
24					72	65	78	81	42	0		
25					72	65	78	78	33	0		
26					72	65	87	78	20	0		
27					75	62	95	78	20	0		
28					78	62	100	78	20	0		
29					78	62	104	78	20	0		
30					78	65	104	78	16	0		
31					78	-----	104	78	-----	0		-----
TOTAL					0	2,108.3	2,049	2,577	2,800	1,609	34.6	
MEAN					0	68.0	68.3	83.1	90.3	53.6	1.12	
MAX					0	84	78	104	100	78	14	
MIN					0	6.3	62	62	78	16	0	
AC-FT					0	4,180	4,060	5,110	5,550	3,190	69	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## HEOGE CANAL BELOW HEAD GATE

NUMBER 76H 06000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					0	87	127	109	118	113	65	
2					0	104	127	113	113	113	65	
3					0	118	127	113	109	113	65	
4					0	127	122	113	109	113	30	
5					0	132	127	113	118	113	14	
6					0	136	132	113	118	109	14	
7					0	136	132	113	118	109	14	
8					0	132	127	109	118	87	14	
9					0	132	127	109	118	87	14	
10					0	132	118	109	118	87	14	
11					0	132	113	113	118	87	14	
12					0	127	118	118	118	91	14	
13					0	132	122	122	118	91	14	
14					0	132	122	122	118	9	14	
15					0	132	122	122	118	..	13	
16					0	132	118	122	118	87	13	
17					0	132	118	122	118	87	4.7	
18					0	127	118	122	118	91	0	
19					0	132	113	122	118	91	0	
20					0	127	113	127	118	91	0	
21					0	127	113	122	122	91	0	
22					0	127	113	118	118	91	0	
23					0	127	113	118	118	91	0	
24					0	127	113	118	113	91	0	
25					0	132	118	118	118	95	0	
26					0	127	122	113	118	91	0	
27					0	127	122	118	118	87	0	
28					47	122	118	113	122	81	0	
29					81	122	113	118	118	81	0	
30					81	122	113	118	122	75	0	
31					127	-----	118	118	-----	0	-----	
TOTAL					209	3,928	3,601	3,618	3,642	2,816	395.7	
MEAN					6.97	127	120	117	117	93.0	12.8	
MAX					31	136	132	127	122	113	65	
MIN					0	87	113	109	109	75	0	
AC-FT					415	7,790	7,140	7,180	7,220	5,590	785	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## HEDGE CANAL BELOW HEAD GATE

NUMBER 76H 06000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0	67	84	67	104	78			
2				0	87	84	84	109	78			
3				0	95	87	104	104	78			
4				0	104	84	104	104	78			
5				0	109	81	113	104	78			
6				0	109	81	109	104	78			
7				0	113	78	109	104	78			
8				0	104	75	109	104	78			
9				0	104	75	104	104	78			
10				0	91	72	99	99	78			
11				0	84	72	75	95	81			
12				0	81	72	62	95	81			
13				0	78	67	62	95	81			
14				0	78	60	67	91	78			
15				0	95	55	75	87	78			
16				0	109	53	81	87	75			
17				0	109	50	84	87	72			
18				0	104	46	87	87	72			
19				0	104	65	95	67	72			
20				0	104	87	91	81	72			
21				0	104	84	91	69	72			
22				0	104	84	91	69	72			
23				0	104	81	95	69	72			
24				0	109	81	95	69	72			
25				0	95	81	95	69	72			
26				0	87	78	81	69	69			
27				0	87	75	81	67	69			
28				0	84	75	81	69	46			
29			-----	0	84	72	95	69	34			
30			-----	16	84	72	99	78	31			
31			-----	-----	84	-----	99	84	-----			
TOTAL				16	2,955	2,211	2,784	2,713	2,151			
MEAN				.53	95.3	73.7	89.8	87.5	71.7			
MAX				16	113	87	113	109	81			
MIN				0	67	46	62	67	31			
AC-FT				32	5,860	4,390	5,520	5,380	4,270			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## HEDGE CANAL BELOW HEAD GATE

NUMBER 76H 06000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0	95	91	84	78	67	36		
2				0	87	91	87	78	67	31		
3				0	87	95	91	78	67	0		
4				0	72	95	91	91	67	0		
5				0	72	87	87	109	67	0		
6				0	78	100	87	109	67	0		
7				0	81	104	87	104	67	0		
8				0	78	104	87	104	67	0		
9				0	67	104	87	104	67	0		
10				0	65	104	84	104	67	0		
11				0	60	109	84	104	67	0		
12				0	54	104	84	104	67	0		
13				0	54	100	84	100	75	0		
14				0	50	100	81	100	81	0		
15				0	43	100	81	95	78	0		
16				0	42	100	81	95	75	0		
17				0	40	95	75	81	75	0		
18				0	37	95	75	75	70	0		
19				0	37	95	81	75	67	0		
20				0	37	91	84	72	67	0		
21				0	36	91	84	70	67	0		
22				0	50	91	81	67	67	0		
23				0	48	91	87	67	65	0		
24				0	81	87	81	70	65	0		
25				0	100	81	95	67	65	0		
26				0	100	81	95	67	65	0		
27				0	100	78	95	67	62	0		
28				0	100	81	100	67	62	0		
29			-----	0	104	84	104	67	62	0		
30			-----	58	104	84	100	67	62	0		
31			-----	100	-----	81	67	-----	0	-----		
TOTAL				0	58	2,159	2,813	2,685	2,603	2,034	39.1	
MEAN				0	1.93	65.6	93.8	86.6	84.0	67.8	1.26	
MAX				0	58	104	109	104	109	81	36	
MIN				0	0	36	78	75	67	62	0	
AC-FT				0	115	4,280	5,580	5,330	5,160	4,030	78	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

HEOGE CANAL BELOW HEAD GATE

NUMBER 76H 06000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					62	81	109	95	65			
2					62	78	109	95	65			
3					62	78	113	95	65			
4					62	78	109	91	65			
5					62	78	78	91	65			
6					62	78	50	91	65			
7					62	78	87	91	65			
8					62	81	87	100	65			
9					62	78	91	100	65			
10					60	78	95	100	65			
11					58	78	95	87	65			
12					58	78	95	87	65			
13					60	78	95	87	65			
14					60	78	91	87	65			
15					60	78	91	87	65			
16					60	78	87	87	63			
17					72	78	95	87	60			
18					78	78	100	78	60			
19					78	78	100	75	60			
20					81	81	100	75	60			
21					78	81	100	75	56			
22					78	81	95	75	54			
23					78	81	91	75	52			
24					78	78	95	73	52			
25					81	78	95	67	50			
26					81	75	95	67	50			
27					81	75	95	67	50			
28					81	78	100	67	50			
29					81	87	95	67	48			
30		-----	-----		81	95	95	65	31			
31		-----	-----		81	-----	95	65	-----			
TOTAL					2,162	2,378	2,928	2,549	1,771			
MEAN					69.7	79.3	94.5	82.2	59.0			
MAX					81	95	113	100	65			
MIN					58	75	50	65	31			
AC-FT					4,290	4,720	5,810	5,060	3,510			

76H 06080 Hedge Canal above Holloron Gulch near Corvallis, MT

LOCATION -- Lat.  $46^{\circ} 20' 10''$ , long  $114^{\circ} 04' 40''$ , in SE $\frac{1}{4}$  NE $\frac{1}{4}$  sec. 27, T. 7 N., R. 20 W., Ravalli County, on Hedge Canal about 1,000 ft. (300 m) above Holloron Gulch, 3 mi. (4.8 km) northeast of Corvallis, Montana.

DRAINAGE AREA -- Above headgate - 1,203 sq. mi. (3,116 sq. km).

GAGE -- Water stage recorder. Type F - recorder on a 2 ft. (0.6 m) parshall flume. Altitude of gage is 3610 ft. (1100 m) from topographic map.

AVERAGE DISCHARGE -- 1975 to 1976 - 1,640 AF/season (2.0 cu. hm/season).

EXTREMES -- Period of record: Maximum discharge, 16 ft.  $^3/s$  (0.45 m  $^3/s$ ), June 24, 1975 and July 25, 1976. Minimum discharge, no flow at times.

REMARKS -- No records for June 1976.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## HEOGE CANAL ABOVE HOLLOWON GULCH

NUMBER 76H 06080

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0	.10	1.9	8.6	8.8	4.1			
2				0	.56	1.9	6.8	9.8	4.2			
3				0	1.4	3.6	4.5	9.0	3.8			
4				0	.47	10	4.9	8.8	3.8			
5				0	1.4	6.6	7.3	6.9	3.7			
6				0	2.2	8.6	6.8	7.0	4.2			
7				0	2.7	7.5	2.5	13	3.6			
8				0	2.5	9.5	3.9	15	1.6			
9				0	2.5	9.4	5.7	15	.93			
10				0	2.2	6.3	8.0	13	2.3			
11				0	3.1	5.1	9.8	9.3	5.9			
12				0	2.6	7.0	9.0	6.1	5.3			
13				0	1.9	10	9.9	5.7	4.6			
14				0	1.9	12	8.4	8.1	4.6			
15				0	3.8	15	5.7	11	4.2			
16				0	5.7	15	4.8	7.4	6.7			
17				0	4.9	13	5.2	4.5	9.0			
18				0	4.7	13	5.3	8.6	7.5			
19				0	3.8	12	7.0	13	7.6			
20				0	4.6	9.3	6.0	7.5	6.6			
21				0	4.2	6.3	4.8	4.0	4.5			
22				0	2.6	5.9	5.0	4.3	4.7			
23				0	3.2	9.3	6.2	5.7	5.4			
24				0	5.0	16	7.4	4.8	6.6			
25				.34	5.3	13	7.6	5.3	6.3			
26				.13	4.5	9.3	6.7	5.2	5.8			
27				.38	2.1	10	6.7	4.2	5.7			
28				.19	3.7	9.7	6.1	4.5	3.9			
29				-----	.08	4.7	8.1	5.9	4.0	.51		
30				-----	.08	4.0	8.1	4.1	3.8	0		
31				-----	1.2	-----	4.3	3.8	-----	-----		
TOTAL				1.20	93.53	272.4	194.9	237.1	137.64			
MEAN				.040	3.02	9.08	6.29	7.65	4.59			
MAX				.38	5.7	16	9.9	15	9.0			
MIN				0	.10	1.9	2.5	3.8	0			
AC-FT				2.4	186	540	387	470	273			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## HEOGE CANAL ABOVE HOLLOWON GULCH

NUMBER 76H 06080

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				0	2.7		4.7	12	1.1			
2				0	3.9		5.1	14	1.9			
3				0	3.7		7.3	10	2.3			
4				0	4.8		7.8	12	2.5			
5				0	5.2		7.1	14	3.0			
6				0	5.2		6.6	10	2.9			
7				0	5.9		8.3	6.4	3.2			
8				0	5.6		7.8	3.8	4.1			
9				0	4.8		13	5.0	2.7			
10				0	4.7		13	4.7	2.3			
11				0	5.7		7.3	5.6	2.9			
12				0	4.4		11	4.3	4.5			
13				0	5.1		3.3	5.7	3.5			
14				0	6.7		1.5	5.5	3.8			
15				0	4.1		2.7	4.6	3.9			
16				0	3.7		4.4	3.5	4.1			
17				0	2.9		11	2.3	4.9			
18				0	3.0		15	2.0	1.7			
19				0	6.3		13	1.6	0			
20				0	8.6		7.0	1.2	0			
21				0	9.0		9.9	2.9	0			
22				0	12		8.6	3.4	0			
23				0	9.8		11	4.5	.34			
24				0	9.5		14	5.2	0			
25				.77	9.8		16	4.6	0			
26				1.7	12		9.7	4.3	0			
27				2.4	12		9.9	3.2	.38			
28				1.9	5.1		12	3.9	.10			
29				1.6	3.8		10	4.3	0			
30				1.8	4.2		8.1	2.9	0			
31				-----	11	-----	13	.93	-----	-----		
TOTAL				10.17	196.1		279.1	168.33	56.12			
MEAN				.34	6.33		9.00	5.43	1.87			
MAX				2.4	12		16	14	4.9			
MIN				0	2.7		1.5	.93	0			
AC-FT				20	389		554	334	111			

76H 07000 Republican Canal below headgate near Hamilton, MT

LOCATION -- Lat.  $46^{\circ} 09' 54''$ , long  $114^{\circ} 09' 25''$ , in SW $\frac{1}{4}$  NE $\frac{1}{4}$  NE $\frac{1}{4}$  sec. 25, T. 5N., R. 21 W., Ravalli County, on left bank 0.2 mi. (0.3 km) downstream from headgate which is at Bitterroot River mile 66.9 (107.6 km), 6 mi. (10 km) south of Hamilton.

DRAINAGE AREA -- Above headgate - 1,391 sq. mi. (3,603 sq. km).

GAGE -- Water stage recorder. Altitude of gage 3,650 ft. (1,113 m) from topography map.

AVERAGE DISCHARGE -- 1968 to 1976 - 38,980 AF/season  
(48.1 cu. hm/season).

EXTREMES -- Period of record: Maximum discharge, 208 ft.  $^3/s$   
(5.89 m  $^3/s$ ), May 5, 1968. Minimum discharge, no flow at times.

REMARKS -- Records good except for periods of extreme moss growth.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## REPUBLICAN CANAL BELOW HEAD GATE

NUMBER 76H 07000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					174	157	147	157	100			
2					186	163	142	152	100			
3					193	168	152	147	100			
4					193	152	168	147	100			
5					208	147	179	147	104			
6					201	147	179	142	100			
7					201	142	174	137	100			
8					174	137	179	137	100			
9					174	137	174	133	100			
10					174	142	163	133	100			
11					193	142	163	133	100			
12					193	147	163	128	100			
13					193	147	157	128	92			
14					179	133	152	128	85			
15					152	128	147	120	85			
16					157	124	152	116	89			
17					163	128	147	116	89			
18					163	137	152	116	92			
19					174	142	152	112	89			
20					168	147	152	108	89			
21					163	142	147	108	85			
22					168	137	147	104	85			
23					157	137	147	104	85			
24					152	137	147	104	50			
25					152	147	174	100	46			
26					152	163	201	100	57			
27					147	174	186	100	57			
28					147	168	179	100	57			
29					157	163	174	104	53			
30	-----	-----	-----	-----	168	157	163	100	50			
31	-----	-----	-----	-----	163	-----	157	100	-----			
TOTAL					5,339	4,392	5,016	3,761	2,539			
MEAN					172	146	162	121	84.6			
MAX					208	174	201	157	104			
MIN					147	124	142	100	46			
AC-FT					10,590	8,710	9,950	7,460	5,040			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## REPUBLICAN CANAL BELOW HEAD GATE

NUMBER 76H 07000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1					142	124	116	142	124			
2					142	133	116	142	124			
3					142	147	116	133	120			
4					142	152	116	133	124			
5					152	157	112	133	124			
6					152	152	112	128	128			
7					152	152	116	128	133			
8					173	152	112	124	128			
9					152	147	108	124	133			
10					142	147	108	120	137			
11					133	142	112	124	142			
12					128	133	108	112	137			
13					128	133	108	112	120			
14					133	124	104	108	120			
15					133	124	108	108	120			
16					128	128	124	104	128			
17					128	137	152	108	128			
18					128	137	163	108	124			
19					128	128	174	104	120			
20					92	128	174	108	78			
21					74	128	174	104	36			
22					71	128	174	104	33			
23					85	124	168	104	26			
24					116	133	168	100	29			
25					128	133	168	108	29			
26					133	128	163	133	29			
27					133	124	163	133	29			
28					128	124	157	128	26			
29	-----	-----	-----	-----	124	124	147	128	26			
30	-----	-----	-----	-----	128	120	147	128	29			
31	-----	-----	-----	-----	128	-----	147	128	-----			
TOTAL					3,998	4,043	4,235	3,701	2,792			
MEAN					129	135	137	119	93.1			
MAX					173	157	174	142	142			
MIN					71	120	104	100	26			
AC-FT					7,930	8,020	8,400	7,340	5,540			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

WATER RESOURCES DIVISION

## REPUBLICAN CANAL BELOW HEAD GATE

NUMBER 76H 07000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					111	131	127	99	127			
2					111	135	123	99	127			
3					111	143	115	103	127			
4					111	143	115	103	123			
5					111	139	115	107	123			
6					111	135	111	111	123			
7					111	123	115	111	127			
8					87	115	131	107	119			
9					119	119	143	107	103			
10					119	127	143	103	99			
11					111	119	143	103	87			
12					99	111	139	103	76			
13					95	111	135	111	72			
14					91	111	131	119	72			
15					87	115	123	123	72			
16					95	115	115	123	69			
17					115	111	115	123	69			
18					127	111	111	123	69			
19					119	115	107	123	72			
20					107	115	107	123	79			
21					99	119	103	127	79			
22					91	119	115	127	83			
23					95	119	119	127	95			
24					99	119	115	127	87			
25					95	119	115	127	76			
26					99	127	115	127	72			
27					115	139	119	127	72			
28					119	143	119	127	69			
29					143	139	103	127	69			
30					135	135	99	127	69			
31					131	-----	99	127	-----			
TOTAL					3,369	3,722	3,685	3,621	2,706			
MEAN					109	124	119	117	90.2			
MAX					143	143	143	127				
MIN					87	111	99	99	69			
AC-FT					6,680	7,380	7,310	7,180	5,370			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

WATER RESOURCES DIVISION

## REPUBLICAN CANAL BELOW HEAD GATE

NUMBER 76H 07000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					62	119	111	115	107	58		
2					65	115	115	115	107	58		
3					95	99	111	107	107	58		
4					107	83	111	123	111	62		
5					95	79	111	123	111	62		
6					95	103	111	123	107	62		
7					91	131	115	119	111	58		
8					91	131	115	115	107	58		
9					81	127	119	115	103	62		
10					91	115	119	115	99	62		
11					99	115	119	115	99	62		
12					103	115	115	115	95	62		
13					103	115	115	111	95	62		
14					103	115	115	111	91	62		
15					99	115	119	111	91	21		
16					95	111	119	111	95	0		
17					107	107	127	111	95	0		
18					111	107	119	111	95	0		
19					107	107	119	107	95	0		
20					103	111	115	107	95	0		
21					99	111	111	103	95	0		
22					99	115	108	99	95	0		
23					99	111	103	103	95	0		
24					99	111	95	107	95	0		
25					103	107	99	103	95	0		
26					111	107	107	103	99	0		
27					115	107	119	99	99	0		
28					119	99	111	99	76	0		
29					123	103	115	103	26	0		
30					123	107	115	107	49	0		
31					123	-----	115	107	0	-----		
TOTAL					3,116	3,298	3,518	3,413	2,840	869		
MEAN					101	110	113	110	94.7	28.0		
MAX					123	131	127	123	111	62		
MIN					62	79	95	99	26	0		
AC-FT					6,180	6,540	6,980	6,770	5,630	1,720		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## REPUBLICAN CANAL BELOW HEAD GATE

NUMBER 76H 07000

## DISCHARGE, IN CUBIC FEET PER SECND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				31	29	107	49	135	123	62		
2				31	6.3	79	46	131	123	62		
3				31	40	59	31	127	119	62		
4				31	65	55	31	119	115	55		
5				31	79	49	29	119	119	46		
6				34	91	49	119	111	123	46		
7				34	99	46	123	111	123	46		
8				31	76	43	115	103	119	43		
9				31	62	34	111	123	115	43		
10				31	62	91	99	148	119	46		
11				31	83	131	91	143	123	46		
12				31	99	103	83	139	131	46		
13				31	103	103	91	139	139	46		
14				31	127	127	119	143	135	46		
15				31	119	139	123	148	131	49		
16				31	115	152	119	148	135	49		
17				31	107	152	95	143	131	46		
18				29	103	152	65	135	131	46		
19				29	107	143	107	131	135	43		
20				29	111	135	99	131	143	43		
21				29	110	135	91	131	148	43		
22				29	115	131	95	131	148	43		
23				29	119	127	83	135	148	43		
24				29	123	127	91	135	143	43		
25				31	123	103	103	131	103	43		
26				29	119	76	111	131	62	43		
27				31	119	29	127	127	65	43		
28				34	123	34	148	123	65	43		
29				37	123	69	139	123	65	43		
30				31	123	65	135	123	62	43		
31				-----	115	-----	139	127	-----	43	-----	
TOTAL				929	3,004.3	2,845	3,007	4,044	3,541	1,444		
MEAN				31.0	96.9	94.8	97.0	130	118	46.6		
MAX				37	127	152	148	148	148	62		
MIN				29	6.3	29	29	103	62	43		
AC-FT				1,840	5,960	5,640	5,960	8,020	7,020	2,860		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## REPUBLICAN CANAL BELOW HEAD GATE

NUMBER 76H 07000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				113	149	110	142	128	39			
2				128	145	103	149	128	37			
3				142	131	110	157	128	37			
4				149	128	131	165	128	39			
5				149	124	149	165	128	39			
6				157	131	161	165	128	39			
7				165	145	161	165	128	41			
8				153	149	157	157	114	39			
9				138	157	153	157	96	39			
10				142	142	153	157	96	39			
11				142	131	153	157	96	39			
12				135	128	149	153	96	39			
13				142	131	153	153	96	39			
14				161	142	157	149	100	39			
15				135	135	149	145	100	41			
16				138	121	145	142	100	41			
17				145	117	142	142	100	41			
18				142	114	135	142	100	39			
19				142	110	149	128	103	39			
20				145	114	185	121	103	39			
21				138	128	173	124	103	39			
22				145	135	138	131	103	39			
23				145	135	138	138	103	39			
24				153	128	135	149	103	39			
25				149	124	135	138	103	39			
26				142	124	138	131	103	39			
27				138	128	138	121	103	39			
28				142	128	131	117	103	39			
29				138	128	128	124	103	39			
30				145	117	128	124	69	39			
31				157	-----	138	124	-----	39	-----		
TOTAL				4,455	3,919	4,425	4,432	3,192	1,213			
MEAN				144	131	143	143	106	39.1			
MAX				165	157	185	165	128	41			
MIN				113	110	103	117	69	37			
AC-FT				8,840	7,770	8,780	8,790	6,330	2,410			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## REPUBLICAN CANAL BELOW HEAD GATE

NUMBER 76H 07000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1				0	99	107	149	186	121	107		
2				0	107	107	153	185	121	107		
3				0	113	107	138	189	121	107		
4				0	127	99	131	189	121	107		
5				0	138	103	135	181	117	107		
6				0	153	96	138	181	117	107		
7				0	161	90	135	185	113	107		
8				0	149	84	161	185	113	103		
9				0	145	78	193	185	110	103		
10				0	145	90	201	181	135	103		
11				0	138	103	197	181	145	103		
12				0	131	121	189	181	145	107		
13				0	121	131	181	169	145	113		
14				0	117	141	177	173	157	103		
15				0	127	145	173	169	157	103		
16				0	131	153	165	161	145	103		
17				0	127	145	161	157	145	99		
18				0	124	141	149	157	145	96		
19				0	121	138	145	157	145	90		
20				0	121	131	145	173	145	81		
21				0	121	127	138	169	145	39		
22				0	121	121	135	157	141	13		
23				0	124	121	127	149	141	8.5		
24				0	131	121	124	145	141	0		
25				0	127	135	117	141	141	0		
26				0	135	145	113	141	138	0		
27				0	124	141	113	138	124	0		
28				0	99	141	110	138	103	0		
29	-----	-----	-----	0	93	149	124	127	107	0		
30	-----	-----	-----	58	90	149	141	113	107	0		
31	-----	-----	-----	103	-----	157	113	-----	0	-----		
TOTAL				58	3,863	3,660	4,615	5,059	3,951	2,116.5		
MEAN				1.93	125	122	149	163	132	68.3		
MAX				58	161	153	201	189	157	113		
MIN				0	90	78	110	113	103	0		
AC-FT				115	7,660	7,260	9,150	10,030	7,840	4,200		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## REPUBLICAN CANAL BELOW HEAD GATE

NUMBER 76H 07000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1				21	96	110	121	135	138	96		
2				21	96	114	161	131	135	25		
3				21	103	114	165	131	131	0		
4				21	110	121	173	131	131	0		
5				21	110	124	173	135	128	0		
6				21	110	124	169	135	128	0		
7				21	114	114	161	138	124	0		
8				21	117	107	169	142	121	0		
9				21	121	107	165	153	121	0		
10				21	121	124	142	149	117	0		
11				19	124	135	124	149	117	0		
12				21	124	135	117	145	117	0		
13				25	124	138	121	142	117	0		
14				29	124	135	117	142	114	0		
15				25	107	138	128	131	110	0		
16				25	96	135	124	124	110	0		
17				25	96	121	114	128	124	0		
18				23	93	128	107	131	128	0		
19				23	93	145	107	128	128	0		
20				23	90	135	103	142	124	0		
21				21	87	128	100	138	124	0		
22				23	81	124	96	128	124	0		
23				21	81	124	90	145	121	0		
24				21	81	131	117	177	124	0		
25				21	81	135	161	165	131	0		
26				21	78	131	153	157	128	0		
27				21	87	128	145	149	124	0		
28				19	96	110	142	149	124	0		
29	-----	-----	-----	19	93	100	153	153	128	0		
30	-----	-----	-----	53	100	117	165	145	124	0		
31	-----	-----	-----	107	-----	145	138	-----	0	-----		
TOTAL				688	3,141	3,732	4,228	4,386	3,715	121		
MEAN				22.9	101	124	136	141	124	3.90		
MAX				53	124	145	173	177	138	96		
MIN				19	78	100	90	124	110	0		
AC-FT				1,360	6,230	7,400	8,390	8,700	7,370	240		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

REPUBLICAN CANAL BELOW HEAD GATE

NUMBER 76H 07000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1					60	135	149	142	121			
2					66	135	149	149	121			
3					90	135	149	142	121			
4					107	135	149	138	121			
5					107	135	149	138	121			
6					103	135	149	135	124			
7					103	117	149	135	128			
8					107	117	149	138	135			
9					103	121	145	138	135			
10					114	121	142	135	135			
11					114	117	142	131	135			
12					110	114	149	131	138			
13					110	114	135	128	142			
14					110	135	124	128	138			
15					107	135	114	128	135			
16					107	135	107	142	138			
17					103	142	107	138	138			
18					103	138	107	138	149			
19					142	138	110	138	149			
20					142	153	100	135	142			
21					138	165	100	135	131			
22					138	157	96	135	131			
23					135	142	90	135	131			
24					135	131	87	142	128			
25					135	114	84	135	128			
26					135	103	100	135	128			
27					135	96	153	135	124			
28					135	121	149	135	124			
29					135	149	142	131	121			
30		-----			135	149	135	131	121			
31	-----	-----	-----	-----	135	-----	142	124	-----	-----	-----	-----
TOTAL					0	3,599	3,934	3,952	4,200	3,933		
MEAN					0	116	131	127	135	131		
MAX					0	142	165	153	149	149		
MIN					0	60	96	84	124	121		
AC-FT					0	7,140	7,800	7,840	8,330	7,800		

76H 09000 Bitterroot River at Hamilton, MT

LOCATION -- Lat.  $46^{\circ} 15' 17''$ , long  $114^{\circ} 10' 22''$ , in NW $\frac{1}{4}$  NW $\frac{1}{4}$  NW $\frac{1}{4}$  sec. 25, T. 6 N., R. 21 W., Ravalli County, on right bank 0.2 mi. (0.3 km) downstream from Corvallis Canal diversion, at the Adirondac Ave. bridge (bridge removed) at Hamilton.

DRAINAGE AREA -- 1,651 sq. mi. (4,276 sq. km).

GAGE -- Water stage recorder. Altitude of gage 3,525 ft. (1,074 m) from topography map.

AVERAGE DISCHARGE -- 1968 to 1976 - 1,074,000 AF/season (1.32 cu. km/season).

EXTREMES -- Period of record: Maximum discharge, 16,600 ft.  $^3/s$  (470 m  $^3/s$ ), June 1 and 2, 1972. Minimum discharge 50 ft.  $^3/s$  (1.42 m  $^3/s$ ), August 29, 1969.

REMARKS -- Records good except for periods of no gage height readings. Station began yearly operation in 1976.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## BITTERROOT RIVER AT HAMILTON

NUMBER 76H 09000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OCT
1				1,140	1,600	5,670	2,570	325	450	900	825	
2				1,180	1,850	6,790	2,270	350	475	862	788	
3				1,130	1,900	8,650	2,390	350	562	862	788	
4				1,110	2,140	7,910	2,570	350	512	825	825	
5				1,160	2,570	7,020	2,570	350	475	788	825	
6				1,160	2,390	7,150	2,570	375	450	788	788	
7				1,120	2,390	6,900	2,450	375	450	750	750	
8				1,090	2,140	6,110	2,390	375	400	750	750	
9				1,050	1,950	6,110	2,520	375	375	712	900	
10				1,050	1,950	6,900	2,450	400	375	712	975	
11				1,120	2,140	7,150	2,270	400	375	712	862	
12				1,240	2,700	8,150	2,020	400	400	788	940	
13				1,240	3,300	7,650	1,750	425	425	938	930	
14				1,200	4,180	6,450	1,400	425	450	862	850	
15				1,200	4,090	5,370	1,240	450	562	825	750	
16				1,160	3,560	4,770	1,120	525	825	900	830	
17				1,120	3,150	5,070	1,090	475	900	825	620	
18				1,090	3,220	6,340	1,050	525	1,650	788	820	
19				1,090	3,740	7,150	1,010	600	1,600	788	840	
20				1,050	4,470	8,150	938	562	1,450	750	810	
21				1,010	5,270	7,400	900	525	1,400	750	780	
22				938	5,570	6,560	825	562	1,200	750	900	
23				938	4,870	6,560	788	562	1,160	750	890	
24				900	4,370	6,110	750	525	1,280	750	830	
25				938	4,270	5,170	675	475	1,280	788	860	
26				900	4,270	4,670	600	425	1,200	862	790	
27				825	4,090	4,670	562	425	1,120	862	790	
28				825	4,270	4,270	562	450	1,200	825	700	
29				900	5,570	3,390	475	562	1,010	825	500	
30		-----		1,090	6,340	3,000	325	512	975	825	820	
31		-----		-----	5,890	-----	325	475	-----	862	-----	
TOTAL				31,964	110,210	187,260	45,425	13,910	24,986	24,974	24,326	
MEAN				1,065	3,555	6,242	1,465	449	833	806	811	
MAX				1,240	6,340	8,650	2,570	600	1,650	938	975	
MIN				825	1,600	3,000	325	325	375	712	500	
AC-FT				63,400	218,600	371,400	90,100	27,590	49,560	49,540	48,250	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## BITTERROOT RIVER AT HAMILTON

NUMBER 76H 09000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OCT
1				1,740	2,510	7,150	1,790	277	62	510	460	
2				1,790	2,440	6,310	1,690	260	62	665	460	
3				1,960	2,320	6,430	1,740	242	62	665	435	
4				2,020	2,320	6,910	1,740	225	62	600	435	
5				2,080	2,320	7,270	1,590	208	62	570	460	
6				2,380	2,580	7,150	1,540	190	62	540	460	
7				2,650	3,080	6,790	1,740	190	62	510	490	
8				2,440	3,840	6,430	1,690	175	62	510	450	
9				2,320	4,390	6,070	1,440	175	75	540	410	
10				2,440	5,400	5,950	1,340	145	75	600	415	
11				2,510	6,430	4,890	1,260	160	88	570	415	
12				2,440	7,030	4,100	1,220	145	88	540	430	
13				2,510	7,630	3,580	1,100	145	100	510	470	
14				2,440	8,240	2,930	910	145	100	485	420	
15				2,320	8,240	2,580	875	130	88	510	400	
16				2,200	7,510	2,320	840	130	100	485	430	
17				2,200	7,150	2,020	770	115	100	460	330	
18				2,440	7,270	1,900	700	115	208	460	215	
19				2,510	8,110	1,960	665	115	276	460	200	
20				2,440	10,800	2,080	630	100	260	460	350	
21				2,320	9,440	1,960	540	100	276	460	300	
22				2,510	7,990	1,840	410	88	260	485	380	
23				3,580	7,630	1,740	390	88	260	485	220	
24				4,690	8,510	2,200	370	75	260	485	340	
25				4,100	9,440	2,380	370	75	260	510	210	
26				3,750	9,960	2,320	410	62	242	485	215	
27				3,320	9,830	2,200	330	62	278	460	200	
28				3,080	8,110	2,200	260	62	295	485	190	
29		-----		2,930	7,150	2,140	278	50	330	485	200	
30		-----		2,790	8,640	1,900	278	62	370	460	215	
31		-----		-----	9,170	-----	278	62	460	-----	-----	
TOTAL				78,930	205,480	115,700	29,184	4,173	4,885	15,910	10,605	
MEAN				2,630	6,628	3,857	941	135	163	513	354	
MAX				4,690	10,800	7,270	1,790	277	370	665	490	
MIN				1,740	2,320	1,740	260	50	62	460	190	
AC-FT				156,500	407,600	229,500	57,890	8,280	9,690	31,560	21,040	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## BITTERROOT RIVER AT HAMILTON

NUMBER 76H 09000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				400	390	5,510	4,590	840	390	485		
2				485	370	6,430	3,920	700	390	510		
3				400	410	8,110	3,750	600	390	485		
4				400	665	10,200	3,580	540	390	485		
5				485	1,220	11,500	3,500	510	390	460		
6					510	1,960	11,900	3,160	540	390	510	
7					600	2,930	11,500	2,720	485	390	510	
8					630	2,790	11,000	2,380	435	665	485	
9					600	2,510	10,600	2,260	410	735	510	
10					700	2,580	9,830	2,200	390	540	540	
11					875	2,260	7,750	2,260	370	485	510	
12					770	2,020	6,310	2,200	390	435	540	
13					700	1,790	5,950	2,260	410	435	700	
14					655	1,590	5,400	2,140	410	435	630	
15					630	1,540	5,510	1,900	390	435	765	
16					600	1,840	5,510	1,740	410	435	750	
17					600	3,500	4,890	1,640	390	410	745	
18					570	5,720	9,090	1,490	390	390	735	
19					540	7,150	6,070	1,260	390	435	720	
20					510	7,630	6,670	1,140	390	570	685	
21					485	7,150	6,790	1,100	390	540	685	
22					510	7,270	6,910	1,140	390	510	700	
23					485	8,110	6,910	1,060	390	700	720	
24					400	8,380	6,670	980	390	805	765	
25					460	8,510	6,670	910	390	665	700	
26					400	9,700	5,840	875	390	630	685	
27					460	10,800	6,070	875	390	600	630	
28					400	8,900	7,270	1,020	390	570	590	
29					410	7,530	6,670	1,260	390	540	615	
30					390	6,750	6,070	1,140	390	510	615	
31					-----	5,720	-----	980	390	610	-----	
TOTAL					16,430	139,725	221,600	61,430	13,680	15,205	19,075	
MEAN					548	4,507	7,387	1,982	441	507	615	
MAX					875	10,800	11,900	4,590	840	805	765	
MIN					390	370	4,890	875	370	390	460	
AC-FT					32,590	277,100	439,500	121,800	27,130	30,160	37,840	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## BITTERROOT RIVER AT HAMILTON

NUMBER 76H 09000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				875	2,510	9,960	3,000	600	390	370	410	
2				875	3,240	6,770	3,000	570	390	350	390	
3				875	4,990	7,870	2,790	630	390	370	390	
4				875	7,030	7,750	2,650	630	370	370	390	
5				945	9,830	7,750	2,580	600	370	370	390	
6					1,100	9,570	7,630	2,580	600	370	370	350
7					1,220	8,510	7,750	2,200	570	370	370	350
8					1,260	8,510	8,510	2,080	540	370	370	390
9					1,260	8,640	9,700	2,140	510	370	370	430
10					1,300	9,300	8,640	2,320	460	370	370	470
11					1,260	9,440	8,110	2,260	435	370	370	490
12					1,220	10,100	7,870	1,960	410	370	350	510
13					1,180	11,000	8,110	1,900	390	370	350	575
14					1,220	10,500	8,380	1,840	390	370	350	540
15					1,340	9,170	7,390	1,790	390	370	350	220
16					1,390	8,770	6,790	1,740	390	370	350	195
17					1,340	7,750	6,430	1,790	390	370	350	230
18					1,300	6,550	5,950	1,640	390	370	350	610
19					1,260	5,620	5,720	1,490	390	370	390	415
20					1,340	4,990	5,620	1,440	390	370	410	415
21					1,540	4,390	5,510	1,440	390	370	410	420
22					1,640	3,920	5,950	1,220	390	370	390	415
23					2,020	3,580	6,310	1,140	390	370	390	330
24					2,440	3,750	5,950	980	390	370	390	460
25					2,440	4,390	5,510	910	390	370	390	430
26					2,320	5,510	5,400	770	390	370	390	330
27					2,200	7,390	4,790	700	390	370	370	460
28					2,080	9,440	4,290	700	390	370	350	420
29					2,000	11,200	3,660	665	390	370	350	420
30					2,200	11,000	3,080	630	390	370	350	420
31					-----	10,800	-----	600	390	370	370	-----
TOTAL					44,395	231,390	205,150	52,945	13,965	11,160	11,450	12,265
MEAN					1,440	7,464	6,838	1,708	450	372	369	409
MAX					2,440	11,200	9,960	3,000	630	390	410	610
MIN					875	2,510	3,080	600	390	370	350	195
AC-FT					88,060	459,000	406,900	105,000	27,700	22,140	22,710	24,330

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## BITTERROOT RIVER AT HAMILTON

NUMBER 76H 09000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				1,540	1,960	15,100	4,790	770	410	450		
2				1,640	2,020	16,600	4,200	735	410	430		
3				1,640	2,020	16,600	3,500	700	410	430		
4				1,690	2,200	15,700	3,160	665	410	430		
5				1,690	2,510	14,600	3,240	630	410	430		
6				1,740	2,930	14,100	3,500	570	410	430		
7				1,960	3,080	15,700	3,750	540	410	430		
8				1,740	3,580	15,900	3,330	510	410	430		
9				1,640	3,670	15,100	3,080	490	410	430		
10				1,590	3,410	15,400	2,580	470	410	430		
11				1,540	3,160	15,400	2,260	450	410	450		
12				1,490	3,080	11,500	2,200	430	410	430		
13				1,490	3,580	8,760	2,380	410	410	430		
14				1,440	4,590	7,390	2,380	410	410	430		
15				1,390	6,670	8,110	2,200	410	410	430		
16				1,440	8,110	8,760	2,020	390	410	450		
17				1,390	8,500	9,410	1,790	390	410	450		
18				1,300	8,630	8,630	1,690	390	410	450		
19				1,260	7,750	7,030	1,590	390	410	450		
20				1,220	7,870	5,840	1,490	390	410	430		
21				1,180	8,760	6,070	1,350	390	430	430		
22				1,180	8,370	5,840	1,300	390	430	430		
23				1,140	7,630	5,950	1,180	410	450	430		
24				1,220	7,150	5,950	1,100	430	430	430		
25				1,220	6,550	5,300	1,020	430	430	430		
26				1,180	5,840	4,690	980	410	450	430		
27				1,220	5,950	3,920	910	410	450	430		
28				1,440	7,030	4,010	875	410	450	430		
29				2,140	8,630	4,590	840	410	450	430		
30				2,260	10,500	4,790	805	410	450	430		
31				-----	12,400	-----	805	410	-----	430	-----	
TOTAL				45,010	178,130	296,740	66,295	14,650	12,620	13,450		
MEAN				1,500	5,746	9,891	2,139	473	421	434		
MAX				2,260	12,400	16,600	4,790	770	450	450		
MIN				1,140	1,960	3,920	805	390	410	430		
AC-FT				89,280	353,300	588,600	131,500	29,060	25,030	26,680		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## BITTERROOT RIVER AT HAMILTON

NUMBER 76H 09000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				270	430	2,380	1,140	190	310	390		
2				270	390	2,140	980	175	310	350		
3				250	470	1,690	875	190	310	310		
4				250	630	1,390	805	230	310	290		
5				250	805	1,300	770	230	310	290		
6				290	1,020	1,690	770	230	290	290		
7				290	1,260	2,200	700	210	310	270		
8				270	1,440	2,450	630	210	430	270		
9				290	1,300	2,650	570	190	450	250		
10				290	1,100	2,140	510	190	410	250		
11				310	945	1,740	490	190	390	250		
12				350	770	1,590	430	160	390	250		
13				430	840	1,740	350	175	370	250		
14				490	1,350	2,510	290	145	430	270		
15				490	2,140	2,790	290	145	430	350		
16				450	3,800	1,960	290	145	430	330		
17				450	3,840	1,790	270	145	430	310		
18				430	4,010	1,590	270	145	430	290		
19				410	3,840	1,440	250	145	430	270		
20				470	3,920	1,390	230	115	450	270		
21				980	3,010	1,490	310	115	490	250		
22				1,350	2,510	1,590	350	115	510	250		
23				1,440	2,580	1,740	310	145	510	250		
24				1,440	2,860	1,640	290	175	510	250		
25				1,260	3,500	1,490	290	150	570	250		
26				630	2,650	1,440	250	230	600	250		
27				510	1,960	1,440	250	210	540	250		
28				665	1,690	1,440	210	250	510	250		
29				630	1,590	1,490	190	290	540	230		
30				540	1,790	1,300	190	290	490	230		
31				-----	1,320	-----	190	290	-----	270	-----	
TOTAL				16,445	59,760	53,630	13,740	5,455	12,850	8,530		
MEAN				548	1,928	1,788	443	189	428	275		
MAX				1,440	4,010	2,790	1,140	290	600	390		
MIN				250	390	1,300	190	115	290	230		
AC-FT				32,620	118,500	106,400	27,250	11,610	25,490	16,920		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## BITTERROOT RIVER AT HAMILTON

## - WATER RESOURCES DIVISION

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1			1,100	3,670	7,150	4,590	840	430	665			
2			1,060	4,010	7,630	4,200	805	430	630			
3			1,000	3,750	9,020	3,750	875	390	630			
4			1,020	3,410	10,200	3,580	875	390	600			
5			1,020	3,750	12,400	3,750	805	370	630			
6			1,060	4,390	10,000	3,840	840	350	630			
7			1,100	4,790	8,890	3,750	945	330	630			
8			1,100	6,310	7,750	3,840	910	350	600			
9			1,140	7,030	7,150	3,500	805	390	600			
10			1,300	6,790	7,150	3,160	805	510	630			
11			1,350	5,840	8,240	3,410	770	735	630			
12			1,350	5,090	10,100	3,160	735	665	630			
13			1,220	4,690	13,900	2,790	735	630	630			
14			1,180	4,100	15,600	2,720	735	630	600			
15			1,260	3,750	16,600	2,580	735	630	570			
16			1,490	3,410	17,800	2,450	700	600	570			
17			1,640	3,080	18,500	2,380	700	630	540			
18			1,790	2,830	16,400	2,260	665	630	510			
19			2,080	2,720	15,200	2,080	700	600	470			
20			2,140	2,860	12,200	2,080	920	600	410			
21			1,960	2,790	10,900	1,960	1,020	570	410			
22			1,850	2,860	8,760	1,790	875	600	410			
23			2,020	2,860	8,630	1,590	770	600	390			
24			2,790	3,160	7,150	1,490	735	600	390			
25			4,100	4,100	7,390	1,390	700	600	390			
26			4,890	6,190	6,310	1,260	630	570	390			
27			4,490	9,150	5,620	1,140	630	540	390			
28			3,840	9,150	4,680	1,060	600	570	390			
29	-----		3,500	8,630	4,590	1,020	510	665	390			
30	-----		3,240	7,630	4,590	945	450	665	370			
31	-----		-----	7,270	-----	910	430	-----	370	-----		
TOTAL			59,140	150,060	301,300	78,425	23,310	16,270	16,095			
MEAN			1,971	4,841	10,040	2,530	752	542	519			
MAX			4,890	9,150	18,500	4,590	1,020	735	665			
MIN			1,020	2,720	4,590	910	430	330	370			
AC-FT			117,300	297,600	597,600	155,600	46,240	32,270	31,920			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## BITTERROOT RIVER AT HAMILTON

## - WATER RESOURCES DIVISION

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1			375	650	7,130	6,630	1,400	913	650	1,000	750	
2			375	600	8,500	7,750	1,200	913	700	1,000	2,200	
3			375	650	9,840	8,750	1,050	838	725	1,100	1,800	
4			375	800	8,880	9,390	950	800	725	1,250	1,650	
5			375	875	8,250	9,660	800	750	775	1,200	1,600	
6			375	875	10,100	9,390	750	750	775	1,200	1,350	
7			375	875	10,600	8,750	725	725	1,050	1,200	1,300	
8			375	913	9,520	7,750	725	700	1,250	1,150	1,400	
9			400	1,100	8,500	7,250	838	675	1,000	1,050	1,550	
10			400	1,450	8,000	6,630	800	650	913	1,050	1,550	
11			400	2,050	8,000	5,900	725	650	913	1,000	1,450	
12			400	2,700	8,630	5,200	700	650	950	913	1,350	
13			450	2,850	9,660	4,900	650	625	950	838	1,150	
14			550	3,230	9,390	4,600	650	625	1,000	800	1,050	
15			650	5,100	10,500	4,000	625	625	950	800	1,050	
16			675	6,880	11,100	3,700	575	600	913	838	1,200	
17			675	7,130	9,250	3,070	625	650	875	775	1,150	
18			675	6,750	8,750	2,780	625	725	913	725	1,000	
19			675	7,000	11,200	2,400	675	650	913	650	775	
20			675	5,900	10,800	2,200	913	650	1,000	600	725	
21			700	4,900	9,660	2,100	950	625	1,300	600	700	
22			725	4,200	9,130	1,850	1,000	625	1,850	600	675	
23			775	3,700	9,000	1,700	1,400	625	1,500	725	775	
24			800	3,450	9,790	1,450	2,250	625	1,300	750	838	
25			800	3,450	10,600	1,400	1,900	650	1,200	725	875	
26			875	3,150	9,520	1,300	1,550	650	1,300	675	800	
27			913	3,080	8,380	1,200	1,350	625	1,150	650	800	
28			838	3,150	7,000	1,150	1,250	650	1,100	600	725	
29	-----		775	3,380	6,250	1,150	1,300	650	1,050	575	725	
30	-----		700	4,500	6,000	1,350	1,200	625	1,050	575	725	
31	-----		-----	5,700	-----	1,450	1,000	-----	1,050	-----	675	
TOTAL			17,526	101,038	271,930	136,800	31,151	20,514	31,790	25,614	34,363	
MEAN			584	3,259	9,064	4,413	1,005	684	1,025	854	1,108	
MAX			913	7,130	11,200	9,660	2,250	913	1,850	1,250	2,200	
MIN			375	600	6,000	1,150	575	600	650	575	675	
AC-FT			34,760	200,400	539,400	271,300	61,790	40,690	63,060	50,810	68,160	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

- WATER RESOURCES DIVISION

## BITTERROOT RIVER AT HAMILTON

NUMBER 76H 09000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	575	675	625	1,000	2,150	7,250	5,100	950	675			
2	575	700	625	1,000	2,740	6,750	4,600	1,200	675			
3	650	675	650	1,000	3,700	6,750	4,100	1,050	675			
4	725	625	625	1,050	5,300	6,630	4,000	913	675			
5	725	600	650	1,250	6,000	6,500	3,900	950	675			
6	675	600	650	1,600	5,900	6,630	4,100	838	675			
7	650	675	650	1,900	6,000	7,130	4,100	838	675			
8	650	775	675	2,200	6,880	8,380	3,800	838	725			
9	650	800	675	2,850	8,250	9,250	3,530	838	725			
10	625	750	675	3,080	9,790	8,630	3,230	800	725			
11	625	700	700	3,080	12,100	8,500	3,380	775	700			
12	625	725	725	3,530	11,100	7,630	3,700	750	750			
13	600	675	725	4,200	9,520	6,500	3,300	725	775			
14	575	650	725	4,000	11,600	5,600	2,630	725	750			
15	600	650	725	3,900	11,900	4,900	2,200	725	725			
16	650	675	725	3,300	10,600	4,900	2,100	875	700			
17	750	675	700	2,930	10,600	5,800	1,950	875	725			
18	800	650	725	2,630	11,100	5,500	1,950	800	913			
19	838	675	725	2,330	10,900	5,500	2,100	800	1,150			
20	725	675	700	2,200	10,500	6,630	1,950	775	950			
21	700	675	725	2,150	9,790	7,880	1,850	775	800			
22	725	675	725	2,000	9,660	7,630	1,850	750	725			
23	775	675	725	1,900	9,390	6,130	1,650	775	725			
24	750	675	725	1,850	9,790	5,100	1,550	838	700			
25	725	650	725	2,050	10,200	4,500	1,500	800	700			
26	700	625	725	2,100	9,520	4,000	1,450	775	650			
27	725	625	775	2,100	8,880	3,600	1,400	800	650			
28	725	625	775	2,000	9,790	3,700	1,300	750	650			
29	725	625	800	1,950	8,880	4,200	1,100	725	650			
30	700	-----	800	1,950	8,000	4,800	875	725	625			
31	675	-----	838	-----	7,630	-----	913	700	-----			
TOTAL	21,213	19,475	22,013	69,080	268,160	186,900	81,158	25,453	21,913			
MEAN	684	672	710	2,303	8,650	6,230	2,618	821	730			
MAX	838	800	838	4,200	12,100	9,250	5,100	1,200	1,150			
MIN	575	600	625	1,000	2,150	3,600	875	700	n25			
AC-FT	42,080	38,630	43,660	137,000	531,900	370,700	161,000	50,490	43,460			

76H 09500 Holloron Gulch below Hedge Canal at Tail End near Corvallis, MT

LOCATION -- Lat.  $47^{\circ} 20' 29''$ , long  $114^{\circ} 4' 30''$ , in NE $\frac{1}{4}$  NE $\frac{1}{4}$  sec. 27,  
T. 7 N., R. 20 W., Ravalli County, 1000 ft. (300 m) downstream  
from end of Hedge Canal, 3 mi. (4.8 km) northeast of Corvallis,  
Montana.

DRAINAGE AREA -- 1 sq. mi. (2.6 sq. km) approximately with waste water  
from Hedge Canal.

GAGE -- Water stage recorder. Type F recorder on a 2.0 ft. (0.6 m)  
parshall flume. Altitude of gage is 3540 ft. (1079 m)  
from topographic map.

AVERAGE DISCHARGE -- 1975 to 1976 - 2,390 AF/season  
(2.94 cu. hm/season).

EXTREMES -- Period of record: Maximum discharge, 19 ft.  $^3/s$  (0.54 m  $^3/s$ ),  
August 9, 1975. Minimum discharge, 0.77 ft.  $^3/s$  (0.02 m  $^3/s$ ),  
several days in April 1976.

REMARKS -- Records good.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## HOLLOWON GULCH BELOW HEOGE CANAL TAIL END

NUMBER 76H 09500

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				.99	1.1	1.9	11	10	6.9			
2				.93	1.2	2.5	8.9	9.9	7.2			
3				.99	2.2	3.8	5.2	9.7	6.2			
4				1.1	1.8	8.3	6.1	6.0	5.6			
5				.99	2.2	4.6	9.9	4.0	5.6			
6				.99	2.9	6.8	8.9	3.4	5.4			
7				1.1	4.2	5.6	4.7	9.3	5.0			
8				1.1	3.4	6.0	7.6	16	3.5			
9				.99	3.4	7.0	9.5	19	3.1			
10				.93	3.2	5.4	11	15	6.0			
11				.93	4.5	6.8	9.3	13	8.0			
12				.93	3.9	9.5	7.9	11	7.9			
13				.93	3.0	14	10	8.6	7.4			
14				.93	2.9	14	7.6	11	8.1			
15				.99	4.6	16	6.3	15	7.9			
16				.93	6.0	16	5.7	11	9.0			
17				.93	5.3	14	6.2	8.5	12			
18				.88	5.0	14	5.2	11	9.5			
19				.88	4.1	14	8.4	16	9.4			
20				.88	5.6	14	7.6	16	8.6			
21				.88	5.1	9.8	7.5	10	6.3			
22				.88	3.0	9.5	8.0	11	6.0			
23				.93	3.9	11	9.9	17	6.5			
24				.88	6.3	17	10	11	7.6			
25				1.2	6.2	18	9.7	7.8	7.8			
26				1.3	6.1	12	7.8	7.3	7.5			
27				2.6	6.0	13	9.1	6.3	7.2			
28				1.4	5.9	14	7.8	8.3	5.8			
29		-----		1.1	5.7	11	6.7	6.7	2.9			
30		-----		.99	5.4	11	5.7	6.2	1.5			
31		-----		1.9	-----	6.8	5.4	-----	-----			
TOTAL				31.48	126.0	310.5	246.0	320.4	201.4			
MEAN				1.05	4.06	10.4	7.94	10.3	6.71			
MAX				2.6	6.3	18	11	19	12			
MIN				.88	1.1	1.9	4.7	3.4	1.5			
AC-FT				62	250	616	488	636	399			

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## HOLLOWON GULCH BELOW HEOGE CANAL TAIL END

NUMBER 76H 09500

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				1.1	2.7	13	4.9	12	3.6			
2				.99	4.1	11	5.0	15	5.6			
3				.93	3.7	9.3	5.0	13	7.4			
4				.86	4.7	6.9	5.9	15	5.8			
5				.88	5.3	6.8	4.1	15	6.6			
6				.88	5.4	8.0	3.6	13	7.8			
7				.82	6.4	9.3	5.3	9.4	5.4			
8				.82	6.1	13	4.7	6.8	3.7			
9				.82	5.3	16	5.9	6.7	2.2			
10				.82	5.2	14	6.8	6.4	3.4			
11				.77	6.2	9.7	4.5	7.3	3.6			
12				.88	4.9	7.8	8.0	6.0	4.6			
13				.93	5.6	8.3	4.0	7.4	4.3			
14				.82	7.2	7.4	3.4	7.2	5.2			
15				.82	4.6	6.9	4.9	7.0	4.9			
16				.82	4.2	8.4	5.7	7.2	4.7			
17				.77	3.4	12	11	6.3	7.4			
18				.77	3.5	11	16	6.4	5.1			
19				.77	6.8	9.1	17	5.6	2.7			
20				.82	7.4	9.3	12	4.3	2.7			
21				.77	7.5	11	13	5.0	2.7			
22				.77	11	8.3	12	5.8	2.8			
23				.77	8.6	6.4	14	7.5	2.7			
24				.77	8.0	5.7	17	8.5	2.1			
25				1.4	7.5	4.4	16	8.4	1.9			
26				1.9	7.8	3.6	12	8.0	1.7			
27				2.6	6.9	2.2	12	8.4	1.7			
28				2.3	8.1	3.5	12	7.3	1.6			
29				1.9	6.8	5.2	9.8	8.0	1.5			
30		-----		2.2	7.2	6.4	8.3	6.2	1.5			
31		-----		14	-----	12	3.4	-----	-----			
TOTAL				32.49	196.1	253.9	275.8	253.5	117.3			
MEAN				1.08	6.33	8.46	8.90	8.18	3.91			
MAX				2.6	14	16	17	15	7.8			
MIN				.77	2.7	2.2	3.4	2.4	1.5			
AC-FT				64	389	504	547	503	233			

76H 15000 Bitterroot River below Burnt Fork Creek near Stevensville, MT

LOCATION -- Lat.  $46^{\circ} 33' 20''$ , long  $114^{\circ} 05' 53''$ , in SE $\frac{1}{4}$  NE $\frac{1}{4}$  NW $\frac{1}{4}$   
sec. 10, T. 9 N., R. 20 W., Ravalli County on left bank, 1.3 mi.  
(2.1 km) downstream from Burnt Fork Creek, 3 mi. (4.8 km) north  
of Stevensville, at Bitterroot River 32.2 mi. (51.8 km).

DRAINAGE AREA -- 2,210 sq. mi. (5,724 sq. km).

GAGE -- Water stage recorder. Altitude of gage 3,240 ft. (988 m)  
from topography map.

AVERAGE DISCHARGE -- 1968 to 1976 - 1,506,000 AF/season (1.86 cu. km/  
season).

EXTREMES -- Period of record: Maximum discharge, 22,200 ft.  $^3/s$   
(629 m  $^3/s$ ). June 17, 1974. Minimum discharge, 100 ft.  $^3/s$ ,  
(2.83 m  $^3/s$ ). August 1969 and 1973.

REMARKS -- Records good except for periods of no gage height readings.  
Station began yearly operation in 1976.

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## BITTERROOT RIVER BELOW BURNT FORK CREEK NEAR STE

## NUMBER 76H 15000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1968

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1				1,720	1,890	7,900	3,520	525	825	1,640	1,390	
2				1,800	2,550	9,210	3,140	475	875	1,580	1,320	
3				1,700	2,700	12,200	3,050	475	975	1,510	1,260	
4				1,760	3,050	12,000	3,420	475	975	1,450	1,260	
5				1,700	3,720	10,200	3,620	475	925	1,390	1,260	
6				1,760	3,820	9,780	3,520	525	875	1,320	1,260	
7				1,700	3,520	9,960	3,420	475	825	1,320	1,200	
8				1,640	3,110	8,650	3,220	475	775	1,260	1,140	
9				1,580	2,760	8,090	3,050	475	675	1,260	1,260	
10				1,580	2,700	9,210	2,960	475	625	1,260	1,450	
11				1,640	2,940	9,960	2,790	475	525	1,260	1,320	
12				1,890	3,720	11,600	2,550	475	625	1,450	1,660	
13				1,890	4,480	11,800	2,400	440	775	1,640	1,640	
14				1,820	5,340	9,780	2,100	400	825	1,580	1,480	
15				1,820	5,610	7,740	1,890	625	875	1,510	1,280	
16				1,760	5,080	6,920	1,770	975	1,200	1,510	1,440	
17				1,700	4,480	7,410	1,640	1,020	1,580	1,450	1,000	
18				1,580	4,360	9,020	1,520	1,140	2,960	1,390	1,420	
19				1,580	5,080	10,200	1,450	1,270	2,880	1,390	1,460	
20				1,510	6,020	11,400	1,450	1,320	2,790	1,320	1,400	
21				1,510	7,090	10,700	1,390	1,270	2,790	1,320	1,440	
22				1,390	7,760	9,210	1,320	1,270	2,480	1,260	1,580	
23				1,260	6,920	9,590	1,320	1,270	2,180	1,260	1,560	
24				1,200	6,020	9,210	1,270	1,270	2,320	1,260	1,440	
25				1,200	6,020	7,580	1,140	1,140	2,400	1,320	1,500	
26				1,200	6,020	6,920	1,020	1,080	2,250	1,390	1,360	
27				1,140	5,890	6,620	925	1,020	2,100	1,450	1,360	
28				1,020	6,020	5,890	825	975	1,950	1,390	1,180	
29				1,020	7,410	4,820	675	1,020	1,820	1,320	720	
30	-----	-----		1,200	9,020	4,020	575	975	1,700	1,390	1,420	
31	-----	-----		-----	8,280	-----	525	925	-----	1,390	-----	
TOTAL				46,270	153,380	267,590	63,465	25,205	45,375	43,240	40,360	
MEAN				1,542	4,948	8,920	2,047	813	1,513	1,395	1,345	
MAX				1,890	9,020	12,200	3,620	1,320	2,960	1,640	1,660	
MIN				1,020	1,890	4,020	525	400	525	1,260	720	
AC-FT				91,780	304,200	530,800	125,900	49,990	90,000	85,770	80,050	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

## BITTERROOT RIVER BELOW BURNT FORK CREEK NEAR STE

## NUMBER 76H 15000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1969

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	OEC
1				2,320	3,140	9,590	3,140	212	138	625	675	
2				2,400	2,960	8,090	3,050	212	138	925	675	
3				2,550	2,700	7,900	3,140	212	138	975	675	
4				2,620	2,480	8,840	2,960	212	138	925	675	
5				2,700	2,550	9,400	2,790	212	138	875	675	
6				3,050	3,050	9,590	2,700	212	175	825	620	
7				3,420	3,620	9,020	2,700	212	138	775	700	
8				3,320	4,480	9,590	2,790	212	175	775	590	
9				3,140	5,340	10,200	2,550	212	175	775	470	
10				3,220	6,180	9,020	2,320	212	175	875	490	
11				3,320	7,580	6,920	2,100	212	175	825	490	
12				3,220	9,020	5,750	1,950	212	175	825	540	
13				3,220	9,590	5,200	1,700	212	212	775	640	
14				3,220	10,200	4,480	1,510	212	212	725	500	
15				2,960	10,300	4,140	1,320	212	212	725	440	
16				2,880	9,400	3,620	1,140	212	12	775	540	
17				2,700	8,650	3,220	1,020	212	212	775	340	
18				3,050	9,020	3,140	925	212	212	725	225	
19				3,320	9,960	2,960	825	212	212	725	210	
20				3,420	13,700	3,050	775	212	288	675	360	
21				3,420	13,700	2,960	675	212	362	675	310	
22				3,320	10,500	2,880	475	175	438	675	380	
23				4,020	9,780	2,620	475	175	438	725	230	
24				6,020	10,500	3,050	400	212	475	725	350	
25				5,890	11,600	3,920	362	175	525	775	220	
26				5,080	12,000	3,720	362	175	525	775	225	
27				4,820	12,000	3,720	525	138	525	725	210	
28				4,480	10,300	4,020	475	138	475	725	200	
29	-----	-----		4,250	9,020	3,820	288	100	475	725	210	
30	-----	-----		3,820	10,200	3,520	212	100	475	675	225	
31	-----	-----		-----	13,300	-----	212	100	-----	625	-----	
TOTAL				105,170	256,820	167,950	45,866	5,940	8,363	23,725	13,090	
MEAN				3,506	8,285	5,598	1,480	192	279	765	436	
MAX				6,020	13,700	10,200	3,140	212	525	975	700	
MIN				2,320	2,480	2,620	212	100	138	625	200	
AC-FT				208,600	509,400	333,100	90,980	11,780	16,590	47,060	25,960	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

BITTERROOT RIVER BELOW BURNT FORK CREEK NEAR SITE NUMBER 76H 15000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1970

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				525	325	6,780	7,580	1,200	250	825		
2				575	288	7,580	6,320	1,140	250	775		
3				525	250	10,300	6,020	925	250	775		
4				525	400	13,500	5,890	925	250	725		
5				525	975	16,000	5,750	825	250	675		
6				525	2,180	17,200	5,340	825	250	725		
7				575	3,520	17,200	4,480	775	250	775		
8				725	3,520	16,500	3,820	625	400	775		
9				725	3,520	15,500	3,420	575	925	775		
10				775	3,420	14,800	3,140	525	875	775		
11				975	3,220	12,000	3,220	438	725	775		
12				975	2,790	8,650	3,140	438	675	725		
13				875	2,550	8,090	3,220	438	675	875		
14				825	2,250	7,740	3,420	362	675	925		
15				775	2,020	7,740	2,700	325	725	875		
16				725	2,250	8,090	2,480	325	725	1,260		
17				675	3,820	7,740	2,400	325	675	1,250		
18				625	7,740	7,580	2,250	325	625	1,230		
19				575	9,400	9,020	1,950	325	725	1,220		
20				525	10,700	9,960	1,760	325	825	1,150		
21				475	9,400	10,200	1,640	325	925	1,150		
22				458	9,400	10,200	1,640	325	825	1,180		
23				438	10,500	10,200	1,640	325	975	1,220		
24				438	11,100	9,400	1,390	325	1,260	1,290		
25				400	11,400	9,400	1,200	325	1,140	1,180		
26				400	12,600	8,460	1,200	288	1,020	1,150		
27				400	14,800	8,840	1,140	212	975	1,010		
28				400	12,600	10,500	1,260	175	925	930		
29	-----			400	9,960	9,960	1,510	212	875	920		
30	-----			362	8,840	9,780	1,510	212	875	980		
31	-----			-----	7,250	-----	1,320	212	-----	970	-----	
TOTAL				17,701	183,388	318,910	93,750	14,902	20,795	29,925		
MEAN				520	5,916	10,630	3,024	481	693	965		
MAX				975	14,800	17,200	7,580	1,200	1,260	1,290		
MIN				362	250	6,780	1,140	175	250	675		
AC-FT				35,110	363,800	632,600	186,000	29,560	41,250	59,360		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

BITTERROOT RIVER BELOW BURNT FORK CREEK NEAR SITE NUMBER 76H 15000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1971

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				1,020	3,220	15,300	4,480	525	250	362	325	
2				1,020	4,140	13,700	4,590	475	325	362	362	
3				1,020	6,180	12,200	4,360	438	362	325	362	
4				1,020	9,210	11,800	4,020	575	400	325	362	
5				1,020	13,300	11,600	3,920	525	362	325	362	
6				1,200	14,400	11,300	3,820	525	362	325	288	
7				1,450	12,000	11,300	3,420	575	325	325	250	
8				1,580	12,000	12,400	3,050	475	362	325	288	
9				1,580	12,400	14,400	2,960	438	362	287	610	
10				1,640	13,300	13,300	3,220	362	325	287	690	
11				1,640	13,700	12,000	3,220	288	288	287	710	
12				1,580	14,400	11,600	2,960	250	288	287	770	
13				1,450	16,000	11,800	2,880	250	250	287	900	
14				1,450	16,200	12,400	2,620	250	250	287	830	
15				1,580	13,300	10,900	2,480	250	250	287	270	
16				1,760	12,600	9,780	2,400	250	250	325	230	
17				1,760	11,600	9,210	2,480	250	250	325	280	
18				1,760	9,400	9,400	2,400	250	250	325	970	
19				1,700	7,580	9,210	2,250	250	250	325	590	
20				1,700	6,620	9,590	2,250	250	250	362	590	
21				1,950	5,610	9,780	2,250	250	288	362	600	
22				2,100	4,950	10,300	2,100	250	288	362	590	
23				2,480	4,360	11,600	1,890	250	250	362	440	
24				3,220	4,360	11,100	1,450	250	288	362	670	
25				3,520	5,080	9,590	1,260	250	250	325	610	
26				3,420	6,780	9,780	1,080	250	288	325	440	
27				3,140	9,960	7,900	825	250	325	325	670	
28				2,880	13,700	6,620	775	213	362	250	600	
29	-----			2,790	16,500	5,750	675	213	362	250	600	
30	-----			2,960	17,200	4,820	625	250	362	213	600	
31	-----			-----	16,200	-----	625	250	-----	250	-----	
TOTAL				57,390	326,250	320,430	77,335	10,127	9,074	9,731	15,859	
MEAN				1,913	10,520	10,680	2,495	327	302	314	529	
MAX				3,520	17,200	15,300	4,590	575	400	362	970	
MIN				1,020	3,220	4,820	625	213	250	213	230	
AC-FT				113,800	647,100	635,600	153,400	20,090	18,000	19,300	31,460	

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

BITTERROOT RIVER BELOW BURNT FORK CREEK NEAR STE

NUMBER 76H 15000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1972

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				2,030	2,750	19,900	8,430	1,590	550	950		
2				2,150	2,680	20,700	7,550	1,460	550	950		
3				2,150	2,680	20,500	6,190	1,460	550	900		
4				2,150	2,900	20,300	5,680	1,340	500	900		
5				2,150	3,310	19,900	5,680	1,210	500	850		
6				2,300	3,800	19,300	6,190	1,100	550	850		
7				2,600	4,100	19,700	6,600	1,000	550	850		
8				2,420	4,500	20,300	6,190	950	550	800		
9				2,300	4,700	20,100	5,800	850	550	800		
10				2,150	4,500	19,500	4,930	700	550	850		
11				2,090	4,200	19,700	4,400	650	500	900		
12				2,090	4,200	18,500	4,100	650	700	900		
13				1,960	4,600	15,200	4,400	600	700	900		
14				1,960	5,930	13,200	4,400	650	750	900		
15				1,840	8,950	13,000	4,300	650	700	900		
16				1,960	12,200	14,200	3,900	650	700	900		
17				1,900	13,000	15,400	3,500	650	700	900		
18				1,780	13,000	15,200	3,230	650	700	900		
19				1,710	12,200	12,800	3,230	650	750	900		
20				1,650	11,600	10,400	3,140	700	800	900		
21				1,590	13,000	9,950	2,750	650	850	850		
22				1,530	12,800	9,950	2,600	650	900	800		
23				1,530	11,400	10,200	2,450	800	950	800		
24				1,530	10,200	10,600	2,300	850	950	800		
25				1,650	9,150	9,350	2,300	850	1,000	800		
26				1,590	8,080	8,430	2,090	800	1,050	800		
27				1,590	7,900	7,200	2,030	750	1,050	800		
28				1,840	9,350	6,750	1,900	700	1,050	800		
29				2,600	12,400	7,900	1,780	600	1,050	800		
30				3,050	15,200	8,430	1,710	550	1,000	750		
31				-----	18,100	-----	1,590	550	-----	700	-----	
TOTAL				59,870	253,380	436,560	125,340	25,910	22,250	26,400		
MEAN				1,996	8,174	14,550	4,043	836	742	852		
MAX				3,050	18,100	20,700	8,430	1,590	1,050	950		
MIN				1,530	2,680	6,750	1,590	550	500	700		
AC-FT				118,800	502,600	865,900	248,600	51,390	44,130	52,360		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

BITTERROOT RIVER BELOW BURNT FORK CREEK NEAR STE

NUMBER 76H 15000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1973

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				500	750	4,400	2,150	150	350	950		
2				500	600	4,100	1,900	100	350	800		
3				500	650	3,230	1,650	100	450	700		
4				500	850	2,680	1,530	200	400	650		
5				450	1,050	2,300	1,400	300	400	650		
6				500	1,400	2,750	1,280	350	350	600		
7				550	1,900	3,800	1,050	350	350	550		
8				500	2,150	4,300	950	350	600	500		
9				500	2,150	4,700	800	350	850	500		
10				500	1,840	4,300	550	350	800	500		
11				550	1,530	3,230	500	350	750	500		
12				550	1,340	2,900	400	350	700	500		
13				750	1,280	2,980	350	350	700	500		
14				950	1,960	4,500	350	350	650	600		
15				1,000	1,900	6,330	350	350	850	750		
16				900	5,550	4,600	350	350	900	800		
17				850	7,200	4,900	350	350	900	700		
18				850	7,900	3,310	350	350	900	650		
19				750	7,730	2,830	350	300	900	600		
20				750	7,550	2,600	350	250	950	550		
21				1,150	6,100	2,750	350	200	1,000	500		
22				1,900	4,930	2,900	350	150	1,000	500		
23				2,050	4,800	3,140	350	150	1,100	450		
24				2,150	5,300	2,980	350	150	1,100	450		
25				2,050	6,600	2,830	350	200	1,100	450		
26				1,460	5,550	2,750	350	250	1,150	450		
27				950	4,100	2,680	350	250	1,150	450		
28				1,000	3,230	2,680	300	300	1,050	450		
29				1,050	2,980	2,750	250	300	1,100	450		
30				950	3,050	2,450	200	300	1,050	450		
31				-----	3,900	-----	150	350	-----	550	-----	
TOTAL				27,630	107,910	101,750	20,310	8,550	23,900	17,700		
MEAN				921	3,481	3,392	655	276	797	571		
MAX				2,150	7,900	6,330	2,150	350	1,150	950		
MIN				450	600	2,300	150	100	350	450		
AC-FT				54,800	214,000	201,800	40,280	16,960	47,410	35,110		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

BITTERROOT RIVER BELOW BURNT FORK CREEK NEAR STE NUMBER 76H 15000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1974

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				1,710	4,200	8,950	8,600	850	650	750		
2				1,710	4,700	9,550	7,550	800	650	800		
3				1,650	4,600	11,800	6,460	850	600	800		
4				1,590	4,100	14,000	5,800	950	600	750		
5				1,550	4,300	16,600	5,800	900	600	800		
6				1,530	5,050	16,200	5,550	850	500	800		
7				1,650	5,680	17,600	5,550	1,000	450	800		
8				1,590	7,200	11,200	5,180	1,000	400	800		
9				1,590	6,350	9,750	5,050	1,000	350	800		
10				1,780	8,780	9,350	5,050	950	350	800		
11				1,900	7,200	10,400	5,800	900	600	800		
12				1,900	6,050	13,000	5,180	850	750	800		
13				1,780	5,430	16,200	4,500	900	850	800		
14				1,710	4,700	18,700	4,200	800	900	800		
15				1,710	4,200	20,100	4,100	800	900	800		
16				1,900	3,800	21,600	3,800	750	900	750		
17				2,090	3,400	22,200	3,400	700	900	750		
18				2,300	3,140	21,600	3,140	650	850	700		
19				2,600	2,980	21,000	2,980	650	850	650		
20				2,830	3,050	20,300	2,980	1,050	850	550		
21				2,750	3,140	17,500	2,750	1,710	850	500		
22				2,530	2,980	17,300	2,450	1,530	850	500		
23				2,600	2,900	16,600	2,230	1,340	800	550		
24				3,310	3,140	16,400	2,090	1,210	800	500		
25				5,050	4,200	16,000	1,780	1,050	800	500		
26				6,600	4,300	15,200	1,530	1,050	800	450		
27				6,330	11,600	12,800	1,400	950	750	450		
28				5,180	12,800	10,800	1,280	950	800	450		
29				4,400	11,800	9,750	1,210	850	800	450		
30				3,900	10,800	8,950	1,100	750	800	450		
31				-----	9,550	-----	1,000	700	-----	450	-----	
TOTAL				79,720	179,120	451,400	119,490	29,190	21,550	20,550		
MEAN				2,637	5,778	15,050	3,855	942	718	663		
MAX				6,600	12,800	22,200	8,600	1,710	900	800		
MIN				1,530	2,900	8,950	1,000	650	350	450		
AC-FT				158,100	355,300	895,400	237,000	57,900	42,740	40,760		

## MONTANA DEPT OF NATURAL RESOURCES AND CONSERVATION

## - WATER RESOURCES DIVISION

BITTERROOT RIVER BELOW BURNT FORK CREEK NEAR STE NUMBER 76H 15000

DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1975

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				400	900	9,150	8,800	1,650	1,780	750		
2				350	850	11,600	10,800	1,460	1,710	800		
3				350	900	13,600	13,400	1,280	1,650	800		
4				350	1,210	13,200	15,000	1,150	1,460	800		
5				350	1,460	11,600	15,400	1,000	1,400	900		
6				350	1,460	13,800	15,000	900	1,280	900		
7				350	1,530	15,200	13,800	900	1,150	1,280		
8				400	1,590	14,200	12,400	900	1,050	1,900		
9				350	1,780	12,400	11,400	900	1,000	1,650		
10				350	2,030	11,400	10,200	950	950	1,460		
11				300	2,750	10,800	8,780	950	850	1,460		
12				350	3,900	11,800	7,550	900	800	1,530		
13				400	4,100	13,400	7,200	850	800	1,590		
14				550	4,700	13,600	6,750	750	650	1,590		
15				700	6,600	14,600	6,050	700	600	1,530		
16				850	10,200	15,800	5,430	650	550	1,530		
17				850	11,000	13,800	4,600	650	650	1,460		
18				900	10,400	12,400	3,900	800	1,000	1,460		
19				900	10,400	15,200	3,400	900	1,000	1,530		
20				850	8,950	16,600	3,140	1,340	1,000	1,710		
21				850	7,050	14,800	2,830	1,650	950	2,090		
22				900	5,930	14,000	2,600	1,530	900	2,830		
23				1,000	5,300	14,000	2,300	2,090	800	2,600		
24				1,100	5,050	14,600	2,030	3,900	800	2,900		
25				1,100	4,800	16,200	1,780	3,600	850	2,030		
26				1,230	4,400	15,200	1,590	2,900	850	2,150		
27				1,460	4,200	13,000	1,460	2,450	800	2,030		
28				1,400	4,100	10,600	1,400	2,380	800	1,840		
29				1,210	4,300	8,600	1,340	2,380	800	1,840		
30				1,050	5,300	8,080	1,460	2,090	750	1,710		
31				7,050	7,050	7,050	1,650	1,900	-----	1,720	-----	
TOTAL				21,600	144,190	393,230	203,440	46,450	29,630	50,370		
MEAN				720	4,651	13,110	6,563	1,498	988	1,625		
MAX				1,400	11,000	16,600	15,400	3,900	1,780	2,900		
MIN				300	850	8,080	1,340	650	550	750		
AC-FT				42,840	286,000	780,000	403,500	92,130	58,770	99,910		

BITTERROOT RIVER BELOW BURNT FORK CREEK NEAR STE

NUMBER

76H 15000

## DISCHARGE, IN CUBIC FEET PER SECOND, CALENDAR YEAR 1976

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			1,300	2,900	10,600	7,200	1,300	975				
2			1,450	3,500	9,550	6,190	1,550	938				
3			1,400	4,630	9,350	5,430	1,600	900				
4			1,450	6,460	9,150	5,300	1,500	863				
5			1,600	7,550	8,780	8,080	1,500	863				
6			1,900	7,200	9,150	8,080	1,400	863				
7			2,390	7,380	10,200	5,300	1,300	900				
8			2,830	8,430	12,000	5,180	1,300	938				
9			3,580	8,080	14,000	4,830	1,300	975				
10			4,030	13,000	13,600	4,430	1,250	975				
11			4,030	15,400	13,200	4,330	1,200	975				
12			4,530	13,800	11,800	4,730	1,150	975				
13			5,180	13,400	9,550	4,730	1,100	975				
14			5,180	15,200	7,730	3,580	1,050	938				
15			4,940	16,800	6,460	3,200	1,050	938				
16			4,630	14,800	6,330	2,750	1,250	975				
17			4,030	14,200	8,780	2,600	1,300	1,150				
18			3,580	14,400	8,250	2,530	1,250	1,400				
19			3,280	14,000	7,730	2,750	1,250	1,600				
20			3,050	13,400	9,750	2,680	1,200	1,300				
21			2,980	12,800	12,200	2,450	1,200	1,100				
22			2,750	12,200	12,600	2,390	1,150	975				
23			2,600	12,000	9,750	2,140	1,200	975				
24			2,450	12,800	7,550	2,080	1,300	975				
25			2,680	14,000	6,190	2,140	1,300	975				
26			2,830	13,600	5,550	1,900	1,250	975				
27			2,830	12,200	4,940	1,650	1,300	975				
28			2,680	13,600	4,940	1,550	1,250	975				
29			2,600	13,200	5,550	1,550	1,150	975				
30			2,600	11,400	6,750	1,350	1,100	938				
31		-----	-----	11,000	-----	1,300	1,050	-----	-----	-----	-----	-----
TOTAL			91,360	353,330	271,980	114,400	39,050	30,254				
MEAN			3,045	11,400	9,066	3,690	1,260	1,008				
MAX			5,180	16,800	14,000	8,080	1,600	1,600				
MIN			1,300	2,900	4,940	1,300	1,050	863				
AC-FT			181,200	700,800	539,500	226,900	77,460	60,010				



